MULTI-CHANNEL SOUND: TWO (INEXPENSIVE) METHODS
TROUBADOUR KRIS KRISTOFFERSON ★ SCOTT JOPLIN'S
HIGH-CLASS RAGS ★ A BANQUET FOR THE OPERAPHILE
Automatic repeat. This is a nice feature, and one that's unique. By unlocking the center spindle the record will cycle and recycle until you stop it. You can do this with single records, or any record in a stack.

The extra-heavy platter. The Fisher 502 has a platter that weighs 7.1 pounds. The extra-heavy platter, together with a heavy-duty 4-pole motor, keeps the 502 running at a constant speed. Wow and flutter are less than 0.1% (that's really low).

The Fisher 502 is the world's finest automatic turntable. Not bad for $129.95.

The Fisher 302. The finest automatic turntable under $100.00. There are many more similarities between the 302 and its higher-priced brothers than there are differences. Wow, flutter and rumble are marginally higher in the Fisher 302, but they're still completely inaudible. The tonearm is of the girder-beam type instead of the tubular type (as in the 402 and 502). But the 302's tonearm is low in mass, and perfectly capable of tracking with a force of one gram. And the other Fisher automatic turntable exclusives we mentioned earlier for the 502 and 402 are all present in the 302.

As a matter of fact, with these features, at $99.95, the Fisher 302 would be pretty tough competition for the 402 and 502. If the 302 weren't ours.

Accessories. There are a number of accessories for the Fisher automatic turntable which are optional (at extra cost). You can have a standard base (the B-4 for the 302 and 402, the B-5 for the 502). You can have a separate dust cover (the PC-4). Or you can purchase the deluxe base which comes complete with dust cover (B-404 for the 302 and 402, B-504 for the 502). And there are 45 rpm spindles to fit all the models.

The Fisher 402. The finest automatic turntable under $130.00. The Fisher 402, if the truth be known, is a bargain. It has most of the features of the 502, and it costs less. Of course, if you insist on owning the best, there's only one turntable for you. But if you'll be satisfied with very good indeed, then consider the 402. The main difference between the machines are the platter weight and the stylus adjustment. The 402's platter weighs 4 pounds. That's enough to keep wow and flutter well below professional standards, but not as massive as the 502's platter. And, in the 402, the stylus angle has been preset to a statistically determined optimum. So you lose the versatility of being able to adjust it yourself. Other than those two points, the 402 performs, looks and sounds like the 502, the world's finest automatic turntable.

The Fisher 402. The finest automatic turntable under $100.00. There are many more similarities between the 402 and its higher-priced brothers than there are differences. Wow, flutter and rumble are marginally higher in the Fisher 402, but they're still completely inaudible. The tonearm is of the girder-beam type instead of the tubular type (as in the 402 and 502). But the 302's tonearm is low in mass, and perfectly capable of tracking with a force of one gram. And the other Fisher automatic turntable exclusives we mentioned earlier for the 502 and 402 are all present in the 402.

As a matter of fact, with these features, at $99.95, the Fisher 302 would be pretty tough competition for the 402 and 502. If the 302 weren't ours.

Accessories. There are a number of accessories for the Fisher automatic turntable which are optional (at extra cost). You can have a standard base (the B-4 for the 302 and 402, the B-5 for the 502). You can have a separate dust cover (the PC-4). Or you can purchase the deluxe base which comes complete with dust cover (B-404 for the 302 and 402, B-504 for the 502). And there are 45 rpm spindles to fit all the models.
Introducing the first line

good enough to bear

Until now, when you bought Fisher components, you had to settle for someone else's automatic turntable.
Not that that was bad. There were several good models to choose from.
But now there's something better.
A line of automatic turntables Fisher is proud to call its own. With a combination of features you won't find on any other automatic in their respective price ranges.

You can take faultless performance for granted.
Since the new automatic turntables are Fisher's, they perform like Fishers. So it goes practically without saying that wow, flutter and rumble equal recording studio and broadcasting standards, and are inaudible. The tone-arms on all three turntables will accept a full range of the finest cartridges available, and will track flawlessly with a stylus pressure as low as one gram or less. All three turntables have variable anti-skating compensation. They all have a cue control that gently sets the stylus down on the precise groove you select. In all three, the operating functions (start, stop, reject) are controlled with a single, easy-to-use lever. And the turntables all have three speeds: 33 1/3, 45 and 78 rpm. But there's more.

The new Fisher automatic turntables are the world's most convenient.
If you've ever owned a piece of Fisher equipment, no matter which one, you know that it's a pleasure to operate. There are always those little Fisher exclusives that make the difference between an adequate piece of machinery and a great one.
The turntables are no exception. For example, all three, even the inexpensive 302, have a pitch control that lets you vary the speed of your records plus or minus three per cent. Which means you can tune your records to your piano (the reverse would be extremely difficult, right?).
We spoke earlier about the cue control. But we didn't mention that it's viscous damped. Which means that when the arm descends on a record, it descends with record-conserving gentleness.
And there's a safety feature in the new Fisher automatic turntables which is absolutely error-proof. It's a sensing device that not only senses the size of a record (or stack of records), but prevents the stylus from descending if there's no record on the platter. (It sounds like a small point, but it may some day save the life of your stylus.)

Only 25¢! $2 value! Send for your copy of The Fisher Handbook, a fact-filled 80-page guide to high fidelity. This full-color reference book also includes complete information on all Fisher stereo components, plus a special insert on the new Fisher automatic turntables.
Enclose 25¢ for handling and postage.*

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Long Island City, N.Y. 11101

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When you come right down to it, you buy a speaker system because you like the way it sounds. And if you're like most people you want to hear music that sounds like the original performance. The full natural sound. Uncolored. Unadulterated. You don't want the bass to blast you out of your armchair or highs that sound like chalk squealing on a blackboard. You want proper balance and a distinct separation of lows, mids, range and highs. And that's precisely what you get with Pioneer's speaker systems.

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THE NEW TROUBADOURS

I compose," said Joni Mitchell, "by discovery." Miss Mitchell was being interviewed on a radio broadcast I overheard some time ago, and I listened as the interviewer probe further into her method of composition. It seems that early on, before she knew enough about music even to tune her guitar properly, she would strike accidental chords and random combinations until she found one that pleased her, one she could "work in" with a developing idea—and so on until she had finished a song. Even for naïve, folk-style music-making, this is an unusually fundamental working procedure, but Joni Mitchell, "discoverer" and "finder," is certainly operating on music's ground floor.

Formal training, as the biographies of many famous musicians will attest, is not an absolute necessity for a composer, though it can certainly save a lot of time and perhaps even increase his chances of producing something musically worthwhile. But composing is, at bottom, not so much a question of manipulating materials (after all, a computer can do that) as of finding them, a simple truth that the Romance languages seem to recognize: troubadour, trouvére, trovador, and, yes, Il Trovatore all sprang, obscurely but probably, from an ancient word meaning to find or to invent.

The original troubadours flourished in France in the twelfth and thirteenth centuries. Cultured aristocrats rather than professional musicians, they wrote both lyrics and music for their songs. Morality, politics, domestic comedy, and sacred subjects were treated, but the principal preoccupation of the troubadours was, of course, love. It has been claimed that the Middle Ages "invented" the idea of romantic love, and, in truth, nobody had ever before heard love songs of the kind the troubadours composed. We certainly have since; it was not so with the early troubadours, nor was it when Mozart and Beethoven composed music and/or lyrics and another will perform them: Cole Porter composes, Frank Sinatra sings. The notions that Porter might have performed what he wrote and that Sinatra might write what he performs are a little startling. But composing is, at bottom, not so much a question of manipulating materials (after all, a computer can do that) as of finding them, a simple truth that the Romance languages seem to recognize: troubadour, trouvére, trovador, and, yes, Il Trovatore all sprang, obscurely but probably, from an ancient word meaning to find or to invent.

Many of the troubadours performed their songs as well as composing them, but in time they were given broader currency by professional performers. Formal training, as the biographies of many famous musicians will attest, is not an absolute necessity for a composer, though it can certainly save a lot of time and perhaps even increase his chances of producing something musically worthwhile. But composing is, at bottom, not so much a question of manipulating materials (after all, a computer can do that) as of finding them, a simple truth that the Romance languages seem to recognize: troubadour, trouvére, trovador, and, yes, Il Trovatore all sprang, obscurely but probably, from an ancient word meaning to find or to invent.

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What good is a cartridge that tracks at 3/4 of a gram but delivers less than 3/4 of the music?

Great. For tracking—but not for listening. To provide great sound, a cartridge should be able to deliver 100% music power, especially at higher frequencies. Like Pickering XV-15 cartridges do. Because our XV-15’s give you 100% music power, you enjoy complete instrumental definition in those critical ranges as well as throughout the entire audio spectrum.

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What is the most expensive component in your stereo system?
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Assuming that you picked one of the component types pictured here.

Although these three components form the typical stereo system, no system is actually complete without number four: records.

And no matter what you may have paid for your receiver, speakers, or turntable, chances are you’ve spent even more for your records. Or will before long.

Your records are not only your biggest investment, but the most vulnerable as well. They can remain as good as new for years or begin to wear the first time they’re played. In which case they become even more expensive.

**How to protect your investment.**

Which brings us to the turntable, the one component that actually contacts your records and tracks their impressionable grooves with the unyielding hardness of a diamond.

What happens then is up to the tonearm. It must apply just the right amount of pressure to the stylus, keep this pressure equal on both walls of the groove, and follow the stylus without resistance as the groove spirals inward.

Then the stylus will be able to respond freely to all the twists and turns in the record groove, without digging in or chopping away.

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Dual tonearms are designed with great ingenuity and engineered to perfection. For example, the tonearm of the 1219 pivots exactly like a gyroscope: up and down within one ring, left and right within another. All four pivot points are identical, and nothing moves with the tonearm except the inner ring. If you can imagine 0.015 gram, that’s the maximum resistance this tonearm offers to the stylus. This suspension system is called a gimbal, and no other automatic arm has it.

Another unique feature of the 1219 tonearm is the Mode Selector, which shifts the entire arm to set the correct stylus angle in either single or multiple play.

Also, the longer the tonearm, the lower the tracking error. The 1219’s arm is $8\frac{3}{4}$” from pivot to stylus.

**Other things to consider.**

In addition to preserving records, a turntable must also bring out the best in them.

The record must rotate at precisely the right speed, or pitch will be off. The motor must be free of vibration, or rumble will be added to the music. The platter must weigh enough to provide effective flywheel action to smooth out speed fluctuations. And, of course, the stylus must get to and from the groove as gently as possible.

**The professionals’ choice.**

All this is something to think about the next time you buy a record or play your favorite one. It’s why Dual turntables have been the choice of professionals for so many years.

Not only for the way Duals get the most out of records (without taking anything away) but for their ruggedness, reliability, and simplicity of operation.

If you’d like to know what independent labs say about Dual, we’ll send you complete reprints of their test reports. Plus an article on what to look for in record playing equipment, reprinted from a leading music magazine.

But if you’re already convinced and can’t wait, just visit your authorized United Audio dealer and ask for a demonstration.

**United Audio** Products, Inc.,
120 South Columbus Ave., Mt. Vernon, New York 10553.
LETTERS TO THE EDITOR

The "Classical" Crisis

Many thanks for Stereo Review's February survey, "Classical in American Classical Music Recording." And special thanks for James Goodfriend's suggestions. I hope copies will be sent to every important official in all the American classical record companies. I particularly liked the ideas of a clearing house for "cutout" material, of distribution to radio stations, and of helping schools bring classical music to children.

Burman S. Timberlake
Lompoc, Cal.

Out here in the provinces, classical music is alive and not just well but thriving. Not only do we have two superb record shops in Seattle which offer all the services Stereo Review says are now rarely available, but we also have two FM stations which offer classical programming from 6 a.m. to 11 p.m., plus two other FM stations which offer morning and evening classical programs. In addition to these riches we have one AM station programming one daily three-hour session of classical music plus two hours on Sundays.

Concerts by our excellent professional symphony orchestra are nearly always filled, and several non-professional suburban symphonies and innumerable smaller groups specializing in chamber music and ancient instruments are also available. A thriving organization called Classical Music Supporters actively works for the sustenance of classical music on radio in the Seattle area. Supplementing this organization is a monthly magazine called Soundings Northwest, which lists program selections a full month at a time for all classical stations. It also contains listings for new classical record releases, stage productions, art galleries and all live musical productions for the current month. I can say without fear of contradiction that Seattle has the best musical climate north of San Francisco, and the people who live here are proud of it.

Laurie J. Stone
Seattle, Wash.

Yet, as Stereo Review points out, most medium-size markets will drop out. While lack of advertising has been the major problem, the classical music listener has also become too demanding. He usually has the best home reproduction equipment of all radio listeners and expects his radio station to employ the best equipment regardless of cost. And he demands that a program guide be printed. This involves time and money that must be written off by large circulation, which doesn't exist outside the large cities. The program guide aids the listener who owns a tape recorder. It costs less to buy tapes than records, so he buys material he should be buying. This means that record companies' sales go down, so they stop making classical discs, and we have a crisis.

Maybe the solution to this problem will come about when classical music is finally forced off the radio, and those who want to hear it will turn back to the concert hall and to the record shops as paying customers.

Richard E. Thomas
Whiteboro, N.Y.

Nowhere in your February issue did I find anyone asking the leading question, "If they're not listening to classical music as they used to, what are they doing with their time?" I suggest that they are glued to the tube, like everyone else, watching the Least Objectionable Program. And God help the classical record companies if TV should ever start programming classical music! That will destroy what's left of the classical record-buying audience.

James Harris
New York, N.Y.

I have read with pleasure the issue dealing with the classical record industry. I was particularly interested in the article "The Fading Signal," which accurately dealt with the problems of the classical FM broadcaster.

There are two points I would like to raise. One deals with the size of staff a radio station needs. It is true that the classical station can make the announcer double up on answering telephones and so forth, but there are time-consuming aspects that other stations don't have. One of these is the problem of accurate advance programming and the preparation and editing of a program guide. A guide of this sort is an absolute must for a station, as its circulation helps to prove the size of the audience to prospective advertisers. And yet, at best, it is

(Continued on page 10)

STEREO REVIEW
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2. The most expensive turntable and receiver connected to any other speakers.

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**straight-line turntable**

The Correct Record Player

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The cartridge travels in a straight line across the record by a "steering" mechanism that is analogous to the action of the front wheels of your car. The arm is supported by a rubber-tired wheel that rides on a slowly and constantly rotating stainless steel shaft. When the arm deviates from tangency with the groove of the record, the resulting angle between the wheel and the shaft causes the arm to move along the shaft and to re-establish tangency.

The ST-4 is provided with gentle pushbutton cueing, automatic photo-electric end-of-record-lift, 2 speeds, (33 and 45) and optional two-piece hinged and removable dust cover.

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(Continued on page 12)
NEW DYNACO QUADAPTOR

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TWO MORE SPEAKERS
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DYNAQUAD® STEREO

The new Dynaco Quadaptor® can be used with virtually any existing stereo receiver or amplifier. Dynaquad® four-dimensional stereo does not require an additional stereo amplifier...just two matched, eight ohm speakers in back of the room. The four speakers are connected to the Quadaptor® which in turn is connected to the amplifier.

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Dynaco A-25 speakers ($79.95 each—assembled only)

Send for literature or pick some up at your dealer where you can see and hear Dynaco equipment.

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IN EUROPE WRITE: DYNACO A/S, HUMLUM, STRUER, DENMARK
The turntables with an infinite choice of speeds.

The variable control Lenco manual turntables offer an infinite selection of speed—a continuous sweep from 30 to 86 rpm. At the standard 16-2/3, 33-1/3, 45 and 78.26 rpm, there are click stops that can be precisely set or adjusted at any time.

Infinitely variable speed control from 30 to 86 rpm is accomplished by a unique motor and drive system. The 4-pole constant velocity motor (1) has conically shaped shaft (2) which contacts a rubber drive wheel (3). The speed control on the deck moves the drive wheel along the tapered shaft. The rim of the wheel makes contact with the underside of the turntable (4). As the wheel moves toward the center of the turntable, speed increases; as the wheel moves away, speed decreases.

With this, you can slow down a complex rush of notes, the better to appreciate the inner voices when you listen next at normal speeds. You can tune a recorded orchestra to match the instrument you play, and join in. Your tuning is not restricted to a paltry fraction of a note, either. You can exercise your urge to conduct, choosing whatever tempo suits you. And you can use it to extend your knowledge of the dance or language, or to accompany slide or movie shows.

And at every one of these speeds, Swiss precision takes over. For example, the Lenco L-75's sleekly polished transcription tonearm shares many design concepts (such as gravity-controlled anti-skating, hydraulic cueing, and precision, knife-edge bearings) with arms costing more alone than the entire L-75 arm and turntable unit. And the dynamically balanced 8.8 lb. turntable reduces rumble, wow and flutter to inaudibility.

The L-75 complete with handsome walnut base at $99.50 offers professional quality and versatility but at far less than studio-equipment prices. The B55 (lighter platter and an arm of almost equal specification) is only $85.00 with base. Both are available now at your Benjamin/Lenco dealer. Benjamin Electronic Sound Corp. Farmingdale, N.Y. 11735, a division of Instrument Systems Corp.

Lenco turntables from Benjamin
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The new KA-7002 incorporates such sophisticated circuitry as direct coupling with complementary-symmetry driver stage for minimum distortion and cleaner, purer sound.

It also features provision for 4-channel stereo, Phono 1 impedance selector switch, outputs for three sets of stereo speakers, terminals for two tape decks, and inputs for two phono, two auxiliaries, plus tuner. And that’s not all. If you really want to know what’s behind the KA-7002, check these important specs!

**Power Output:** (IHF) 196 watts @ 4 ohms, 170 watts @ 8 ohms; 100 watts RMS Continuous Power, 50 watts per channel with both channels operating simultaneously with 8 ohms load at any frequency from 20-20k Hz • **Harmonic Distortion:** less than 0.5%, rated output from 20-20k Hz • **IM Distortion:** less than 0.3%, rated output or any level less • **Frequency Response:** 20-50k Hz ± 1 dB • **Sensitivity:** Phonos 1-2/Mic, 2.5 mV; Aux 1-2/Tape Play A-B, 200 mV • **Main Amp Input:** 1V • **Signal-to-Noise Ratio** (below rated output): Phonos 1-2 (2.5 mV), 65 dB; Mic, 67 dB; Aux/Tuner/Tape Play, 77 dB • **Damping Factor:** 45 @ 8 ohms • **Bass Control:** ± 10 dB @ 100 Hz w/2 dB Step Switch (Tone Control Switch @ 300 Hz) • **Treble Control:** ± 10 dB @ 10k Hz w/2 dB Step Switch (Tone Control Switch @ 2kHz) • **Low & High Filter:** 18 dB per octave • **Dimensions:** 16-5/16”W, 5-5/32”H, 11-1/32”D • **Weight:** 22 lbs. • **Price:** $299.95

For complete specifications write:

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15711 So. Broadway, Gardena, Calif. 90247
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Alas. A lot of people are concerned with two things when they shop for an automatic turntable. How it performs (which is good) and what will old Harry think of this baby? (which is bad).

The BSR McDonald 610/X is really a great turntable. It’s got a synchronous motor, dual-range anti-skate control, viscous damped cue and pause, and more.

What’s more, it’s what we call a Total Turntable. That means you get a Decoromatic power base (a $15 option elsewhere), our deluxe dust cover (likewise for $7.50) and a Shure M-93E elliptical magnetic cartridge (it lists for $40) all included in one low price. So while our price may seem the same as their price, it’s not.

If your 610/X doesn’t impress your friends, maybe you need new friends.

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BIASED
IN THE INTEREST OF BETTER SOUND

The new premium cassette tapes make any cassette recorder sound better. And the Concord F-106 stereo cassette deck makes new tapes sound better.

It’s the first cassette deck to make true high fidelity recordings.

The secret is a little switch and a unique circuit that adjusts the record bias from the normal value used for standard tapes to the higher levels that let premium cassettes just open up and sing.

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At your Concord dealer, $119.79 (includes quality dynamic microphone, remote control, super dynamic cassette). Concord Electronics Corporation, 1935 Armacost Avenue, Los Angeles, California 90025; a subsidiary of Ehrenreich Photo-Optical Industries, Inc.

CIRCLE NO. 11 ON READER SERVICE CARD

The American Gramophone Society

The American Gramophone Society, which is affiliated with the National Federation of Gramophone Societies, London, England, would appreciate hearing from readers interested in English music.

M. M. MAJORSKY
Corresponding Secretary
23241 Berkeley
Oak Park, Mich. 48237

CIRCLE NO. 11 ON READER SERVICE CARD

audio for classical music of all kinds would be widened and deepened.

M. DAVID STEIN
Evanston, Ill.

"JC—Superstar"

If I am angered and disturbed by Carl Belz’s review of “Jesus Christ—Superstar” (February), if he were truly interested in listening to it as rock opera, he would have found it an excellent piece. There were many Beatle-style sections, not to mention some resembling Mozart and Wagner. “Superstar” may not match his description of an opera, but nonetheless it is still spectacular, and far better than many operas I have heard. Judging by what others have said and the number of artists who have recorded selections, somebody must like it.

GREG BADGER
Tacoma, Wash.

"Beyond the Basic Repertoire"

The new series, “Beyond the Basic Repertoire,” is one of the most exciting ideas I’ve encountered in any magazine. It set me thinking about pieces in my own collection or those I may have wished for. I would like to suggest a few works for Mr. Clark’s consideration. How about Tchaikovsky’s Sonata in G or his Second Piano Concerto, the Hexameron Variations of Liszt, or some of Haydn’s earlier symphonies? Since opera and vocal music have not been dealt with in Martin Bookspan’s series, perhaps some columns could be devoted to these. I look forward to each installment and encourage Mr. Clark to make his contributions as frequently as possible.

FREDERICK KOZMA
Norristown, Pa.

Lieder Discographies

I have made discographies of the lieder of Schubert, Wolf, Schumann, Brahms, Mendelssohn, and Strauss, and one of the Schubert-Schumann-Brahms part songs and choral music. The first two are $2 and the other five $1 from the address below.

J. F. WEBER
1 Jewett Place
Utica, N. Y., 13501

Percy Grainger

May I thank James Goodfriend for his marvelous review of the new London recording of Percy Grainger’s music (January)? As a music major at the University of Texas at Austin, I have had the privilege of performing much of his instrumental music and have grown to adore his music as much as any other composer’s. It was thrilling to see someone finally give Grainger the credit he is due in a widely read publication.

I would imagine that anyone interested in further Grainger listening would find the recordings by the Eastman Wind Ensemble most satisfying, especially their rendition of the Hill Song No. 2 led by Frederick Fennell.

PHIL M. JOHNSON
Austin, Texas
PARTNERS IN EXCELLENCE:

KENWOOD KR-5150 fm-am stereo receiver / KL-5060 3-way speaker system

Choose a quality stereo receiver like KENWOOD's KR-5150 that delivers 150 watts of dynamic power, excellent broadcast reception, and unlimited potential to expand your stereo system! Then team it with the finest of stereo speakers... KENWOOD's KL-5060 3-way Speaker System with 12" woofer, 6½" midrange and 2 horn-type tweeters... for smooth-as-silk crossover and minimum distortion. It's a partnership that assures you of optimum quality and dependable performance year in and year out.

KENWOOD offers you a choice of seven excellent stereo receivers and four fine speaker systems—partners in excellence to meet your personal stereo requirements—and gives you stereo at its exciting best!

KR-5150, 150-Watt (IHF), FET, IC, FM/AM Stereo Receiver...
$319.95 (Walnut Cabinet, optional)

KL-5060, 3-Way Speaker System with 12" Woofer, 6½" Midrange, 2-Horn-type Tweeters...
Metal Grille...$279.95/pr

For complete specifications on KENWOOD Stereo Receivers and Speaker Systems, write...
How new Memorex Recording Tape shattered glass and why it will make your favorite music sound better.

To shatter glass with the human voice, a singer must reach and hold the pitch it takes to make a given glass vibrate. That pitch must then be projected with enough volume to vibrate the glass to its shatter point.

We figured if we could capture that precise pitch on our new Memorex Recording Tape and play it back at the same volume, we'd dramatically demonstrate the exactness with which our tape can reproduce music.

So that's exactly what we did.

Memorex has increased tape sensitivity, increased high-frequency response, and improved signal-to-noise ratio; so much, that now you can record your favorite music, then play it back the same way it sounded live.

You should hear us.

MEMOREX Recording Tape
Reproduction so true it can shatter glass.

Incidentally, our cassette tape also shatters glass.
Until now, you had to buy your components separately to get this kind of quality.

You get Altec's new 44/44 watt RMS receiver, Garrard's best turntable and Shure's high-track cartridge. These components come all put together in the new Altec 911A stereo AM/FM music center. The high-performance receiver section is actually an Altec 714A receiver on a different chassis. It delivers 44 watts RMS power per channel—both channels driven at 8 ohms—with less than 0.5% harmonic distortion. (For comparison purposes the IHF music power is 180 watts.) It includes 2 crystal filters for better selectivity and 3 FET's for better sensitivity. The Garrard automatic transcription turntable is the SL95B. And the Shure elliptical high-track cartridge is the M93E. For the first time, 3 separate top-of-the-line stereo components are built into a single, convenient package. So the new Altec 911A music center will save you space and save you money and truly give you component quality.

When HIGH FIDELITY tested the 714A receiver which is the same receiver component in the new Altec 911A music center, they reported "FM performance either met or exceeded manufacturer's specifications." "IHF sensitivity came in right on the nose at 19 microvolts. Capture ratio was outstanding at 11.1 dB." They went on to report, "in our cable-FM test the 714A easily climbed into the champion class by logging a total of 60 stations, of which 45 were judged suitable for critical listening or for off-the-air taping. Even without the cable antenna hookup, the 714A—fed only by an incoerced dipole in a different reception area—pulled in no less than 34 FM stations, of which 22 were in the 'good to excellent' class. Our past data tells us that this is a new record."

A QUALITY COMPANY OF LTV LING ALTEC, INC.

HIGH FIDELITY also reported on the amplifier section; "...offers high power, linear response, accurate equalization, very low distortion." "The unit's specifications were either met or exceeded in CBS Labs' tests. With both channels driven simultaneously the 714A furnished better than 44 watts on each channel; its bandwidth response for this power level at rated distortion of 0.5% ran from below 10 Hz to 30 kHz. Frequency response at a 1-watt level extended within 0.75 dB from 20 Hz to 20 kHz."

The new Altec 911A stereo AM/FM music center is at your local Altec dealer's right now. It sells for $499.00 and includes an oil-jd walnut base and molded dust cover. Check it out for yourself. Or, write us directly for a copy of HIGH FIDELITY's test report and a complete Altec catalog. Altec Lansing, 1515 S. Manchester Ave., Anaheim, CA 92803.

Test report excerpts courtesy of HIGH FIDELITY magazine.
ACOUSTIC RESEARCH has announced availability of its stereo FM tuner, which has an FET front end and integrated-circuit i.f. amplifiers. FM sensitivity is 2 microvolts (1HF) or better, harmonic and intermodulation distortion are under 0.5 per cent for both mono and stereo operation, and frequency response is 20 to 15,000 Hz ±1 dB, mono or stereo. Other specifications include a capture ratio of 2 dB or better, at least 55 dB selectivity, and image and i.f. rejection of better than 70 and 100 dB, respectively. Stereo separation is a minimum of 35 dB at 50 Hz, 40 dB at 400 Hz, and 30 dB at 10,000 Hz. Controls in addition to the tuning knob are three rocker switches—on/off, interstation-noise muting (hush), and stereo/mono—below the linear tuning dial, and a rear-panel output-level control that affects both pairs of stereo outputs. Minimum output for 100 per cent modulation is 1 volt into loads of 10,000 ohms or higher. The AR tuner measures approximately 5⅞ x 4⅝ x 9⅞ inches exclusive of the control knobs, and its suggested price of $210 includes a black aluminum cover. An optional oiled-walnut enclosure costs $15 additional.

Circle 144 on reader service card

McIntosh Speaker Systems

McINTOSH has introduced five different wide-dispersion four-way speaker systems in contemporary and Mediterranean cabinet styles. The four drivers, which are used in various arrangements in the systems, are a 12-inch woofer, 8-inch cone mid-range, 1⅛-inch dome upper mid-range, and a cone tweeter with a ½-inch center dome. These cover the ranges from 20 to 250 Hz, 250 to 1,500 Hz, 1,500 to 7,000 Hz, and 7,000 to beyond 20,000 Hz, respectively. The low-frequency speaker is highly damped and designed to operate in conjunction with either of two McIntosh equalizers, intended to be connected between preamplifier and amplifier or in the tape-monitor loop of an integrated amplifier or receiver. (Both equalizers have their own tape-monitoring switching facilities to replace those they take up.)

All speaker systems are of 8-ohm impedance. They range from the ML 1 C (shown) in a contemporary walnut cabinet (26 x 15 x 13½ inches), which contains one of each type of driver, to the ML 4 C (ML 4 M in Mediterranean styling), which measures 41 x 29 x 21½ inches and has four woofers, one cone mid-range, four dome upper mid-ranges, and two tweeters. Power-handling capability of the ML 1 C is 100 watts continuous at 20 Hz; an amplifier with an output of at least 40 watts continuous is recommended. Prices of the systems are from $312 (ML 1 C) to $1,012 (ML 4 C and 4 M).

Of the two McIntosh Environmental Equalizers, one, the MQ 101 ($250), has, in addition to the low-frequency controls for each channel to correct for room acoustics as well as the bass rolloff of the speaker systems. Up to about 20 dB of boost are available at 20 Hz. The second, the MQ 102 ($74), has separate low-frequency controls for each channel and one to correct for mid-ranges and treble controls that affect both channels simultaneously. These provide between ±4 and ±5 dB of adjustment at 4,000 and 20,000 Hz, respectively.

Circle 145 on reader service card

Ampex AX-300 Stereo Tape Deck

AMPLEX has introduced its AX series of stereo tape decks, the top model of which is the AX-300, a six-head auto-reversing machine with a three-motor transport and three operating speeds (7⅛, 3⅞, and 1⅛ ips). The heads (erase, record, and playback for each direction) are grouped symmetrically on either side of the centrally located capstan. The transport controls, which are solenoid activated, include a PAUSE function. Built-in logic circuits control tape tension and coordinate switching between speeds and operating modes.

The AX-300 records and plays back in either direction, and is equipped with automatic end-of-tape shutoff. Its automatic-reversing mechanism is triggered by a 20-Hz tone that can be recorded on the tape by the user by means of a built-in oscillator. (Ampex prerecorded tapes come with these tones already recorded.) If tones are placed at both the beginning and the end of a tape, the AX-300 will play both sides in sequence continually when the transport's REPEAT switch is in the "on" position. Inputs, which can be adjusted and mixed through their four associated slider controls, consist of two for line sources and two more that will accept line or microphone signals. The slider controls also set levels for sound and echo operation, functions which (along with source-tape monitoring) are introduced by lever switches and a five-position mode selector. There is also a continuously variable noise-reduction filter which can be used to introduce a 12-dB-per-octave high-frequency rolloff anywhere from 3,000 and 16,000 Hz. Two large recording-level meters with

(Continued on page 22)
Wait till you get your pause on a TEAC A-1230

You'll be making the cleanest tapes on the new TEAC A-1230. Thanks to TEAC's unique symmetrical control system with Edi-Q. This advanced system allows you to edit while recording - instantaneously. In a flash, before that unwanted FM commercial is upon you, flick - and you're in PAUSE mode. Your tape stops silently, instantaneously. Record amps are fully fired and at standby for the first note of your recording restart. End of commercial and you toggle deftly back to "PLAY." You are off to a clean new recording start.

But Edi-Q is only one of a whole host of professional features on the A-1230. It also incorporates the same kind of advanced design and new-features engineering philosophy that established TEAC's famous Model A-1200 as the best value in various consumer tests.

There's a record bias switch for both high-output, low-noise tape and standard tape alike. So you get the fullest dynamic range with any type of tape. It also ensures the TEAC A-1230's high-performance characteristics.

So much for new refinements. Remember those other advanced A-1230 features: three-motor solenoid operation, three heads; tape/source monitoring, mic and line mixing, independent record mode switches for 1/4-track stereo/mono operation, independent stereo headphone monitor, tape tension and spring-loaded automatic shutoff arms.

And the price, too, will give you pause; it's sensible.
NEW PRODUCTS

VU characteristics can be calibrated by means of external adjustments for different tape types, as can the bias signal strength (bias-oscillator frequency is 100 kHz). The front-panel headphone jack will drive 8-ohm phones.

Frequency-response specifications for the AX-300 are 40 to 16,000 Hz ±3 dB at 7½ ips and 80 to 12,000 Hz ±4 dB at 3½ ips. Wow and flutter for the two speeds are under 0.09 per cent (7½ ips) and 0.15 per cent (3½ ips), and the signal-to-noise ratio is 55 dB. Operating speeds are accurate within tolerances of ±1 per cent (7½ ips) and ±2 per cent (3½ ips). Fast-wind time for 1,200 feet of tape: 55 seconds. On its walnut base the AX-300 has overall dimensions of 16½ x 14½ x 8 inches, and can be operated horizontally or vertically. Price: $649.95. The AX-50, the second model in the AX series, is a single-motor, three-head deck that sells for $279.95.

Circle 146 on reader service card

CTS Unmounted Speakers

- CTS’ free four-page pamphlet describes five speaker-system combinations for the CTS line of unmounted speakers and crossover-network components. The suggested systems range from a single 4½-inch full-range driver ($7.75 plus shipping) intended for an enclosure volume of less than ¼ cubic foot to a three-way system (12-inch woofer, 4½-inch mid-range, and 3-inch tweeter as shown, plus crossover networks and two level controls) for approximately 2-cubic-foot installation. The latter costs $63.91 plus shipping. All drivers are designed for acoustic-suspension operation and are rated at 8 ohms nominal impedance. Power-handling capabilities range from 2 to 50 watts. The systems come with enclosure dimensions and wiring diagrams for the crossover networks and level controls. They are available by mail order only.

Circle 147 on reader service card

Fisher 701 Four-Channel Receiver

- FISHER’s new 701 four-channel-stereo receiver is said to be potentially compatible with all four-channel systems currently in use or under consideration. It consists of four power amplifiers (40 watts continuous power each into 8 ohms at 0.5 per cent harmonic and 0.8 per cent intermodulation distortion) with bass, treble, balance, and volume (slider-type) controls for the front and rear channels. There is an AM/stereo FM tuner section that Fisher will modify at cost to conform to any quadrasonic FM broadcasting system that may be adopted. Inputs are provided for magnetic phono, two auxiliary sources, and tape deck (one four-channel deck or two two-channel decks). A tape-monitor switch with three active positions permits the front and rear tape inputs to be monitored separately or simultaneously.

There are two stereo-headphone jacks—one for the front and the other for the rear channels.

The Fisher 701 has special facilities to provide a simulated four-channel effect by routing a modified version of the front-channel signals to the rear channels. The four signals thus derived can also be recorded on a four-channel tape deck via the tape-output jacks. Mode switching permits selection of mono, stereo, real or simulated four-channel stereo, and four-channel reverse (front channels to rear and rear to front). The receiver will handle up to eight speakers with switching provided for the main four, remote four, both, or headphones. There are high-cut filter and loudness-compensation push-buttons for the front and rear channels. Pushbuttons also control switchable interstation-noise muting and APC. Additional specifications for the amplifier section include a frequency response of 20 to 25,000 Hz ±1.5 dB, power bandwidth of 20 to 25,000 Hz, and signal-to-noise ratios of 60 dB (phono input) and 65 dB (high-level inputs). IHF sensitivity for the FM section is 1.7 microvolts. The capture ratio is 1.5 dB, selectivity is 65 dB, and stereo separation at 400 Hz is 36 dB.

The 701 employs Fisher’s “Autoscan” electronic tuning system as well as manual tuning. The Autoscan function can be used to continuously sweep the FM dial automatically or to proceed from station to station. A meter at the left of the tuning dial reads the frequency of each station. (This meter also serves as a signal-strength indicator for manual tuning.) Colored lights above the meter come on to indicate stereo broadcasts and the receiver’s mode of operation. Overall dimensions for the 701 are approximately 17 x 5½ x 14½ inches. Price: $699.95. A walnut cabinet is $22.95 more, and an optional remote control for the Autoscan function costs $9.95.

Circle 148 on reader service card

STEREO REVIEW
Every so often, an idea just won't wait until its time has come. So it arrives ahead of schedule. And begins a trend.

Take the new Sony 6065 receiver, for instance. It takes direct-coupled circuitry into a new dimension. Which means there is nothing to come between you and the sound—no coupling capacitors, and no interstage transformers.

Those capacitors and transformers could cause phase shift or low-end roll-off, or diminish the damping factor at the low frequencies where you need it most.

So, instead we use Darlington-type coupling, a complementary-symmetry driver stage, and an output stage that needs no coupling capacitor between itself and the speaker because it's supplied with both positive and negative voltages (not just positive and ground).

The results speak for themselves. The amplifier section puts out 255 watts* with less than 0.2% distortion, and a cleaner, purer sound than you've heard before in the 6065's price range (or, quite probably, above it).

And the FM section has not only high sensitivity and selectivity (2.2 µV IHF and 80dB respectively) but lower noise and better interference rejection, to help you discover stations that you've never heard before—re-discover stations that were barely listenable before.

You'll discover new flexibility, too, in the control functions. Sony's famous two-way function selector lets you switch quickly to the most used sources—or dial conventionally to such extras as a front-panel AUX input jack, or a second phono input. There's a center channel output, too, to fill the hole-in-the-middle in large rooms, or feed mono signals to tape recorders or a remote sound system.

The Sony 6065. $399.50

Another "impatient" receiver also featuring the new Sony approach to direct coupling, the 6055 delivers 145 watts*. Moderately priced, this receiver is a remarkable value at $299.50.

So, there they are, months ahead of schedule and way ahead of their time. Don't wait to enjoy them at your dealer. Sony Corporation of America, 47-47 Van Dam Street, Long Island City, New York 11101.

*IHF Constant power supply method at 4 ohms.

TWO NEW RECEIVERS FROM SONY®
With and without Dolby, that is. The new CAD5 comes with. The original CAD4 without. Which leaves you with the logical question of whether you want to be with or without.

Unless you've recently arrived on this planet, you know that Dolby is special circuitry that reduces tape hiss to the point where it's virtually eliminated.

At the moment, only Harman-Kardon and two others offer Dolbyized cassette decks. We're sure you'll consider all three. That is, if you consider the advantages of Dolby worth the extra cost in the first place.

The choice among non-Dolbyized cassette decks is either CAD5 (with Dolby) $229.95. CAD4 (without Dolby) $159.95.

Now the last word in cassette decks comes with and without.
LOUDNESS COMPENSATION: The so-called "loudness control" has been a feature of practically every component amplifier, preamplifier, and receiver sold here in the past two decades. Years ago, there was considerable controversy as to the validity of the concept of "loudness compensation." I don't propose to renew the argument, but it seems likely that many recent converts to components may be unaware of the history of the control or switch marked LOUDNESS on their amplifiers and receivers. The rationale for its existence stems from psychoacoustic studies made several decades ago by Messrs. Fletcher and Munson of Bell Telephone Laboratories.

Their researches indicated that the human ear responds in a reasonably uniform manner to a wide range of frequencies, but only at high volume levels. As the sound level is reduced, the ear becomes less sensitive to low frequencies and, to a much lesser degree, to high frequencies. Their findings are summarized in a family of curves—"equal-loudness contours"—that show the relative sound pressure required at various frequencies and listening levels to produce the same subjective loudness at all frequencies. Subsequent tests by other workers in the field developed equal-loudness contours differing in detail from the Fletcher-Munson curves, but generally similar in appearance.

Long after the initial tests by Fletcher and Munson, when high-fidelity reproduction was available in a home setting, people found that music tended to sound best (from the standpoint of frequency balance) at high levels. It lost bass and sounded "thin" when played at reduced volume. This could clearly be attributed to the Fletcher-Munson effect.

The "solution" was to use a compensated volume control, called a "loudness control," which reduced the bass frequencies less than the middle- and high-frequency levels as the volume was turned down. The goal of this relative bass boost was to shape the amplifier frequency response in accordance with the Fletcher-Munson equal-loudness contours, so that the relative audibility of all frequencies in the sonic spectrum would remain fairly constant over a wide range of listening levels.

To many, this seemed a great idea. True, some of the lower bass sounds, formerly inaudible at low levels, could now be heard at moderate or even "background" listening levels. However, and unfortunately, a more "natural" sound seldom resulted from this technique. After all, the ear's response to live music also exhibits a loss of bass at low levels, so that restoring it to reproduced music certainly could not improve the faithfulness to the original sound. And remember, the Fletcher-Munson curves were derived from testing perhaps hundreds of people, and represent the average results of the tests. The odds are against any exact match between the average curves and the hearing of any one individual.

Technical objections aside, my ears tell me that most music, when modified by a loudness-compensation circuit, simply does not sound very good. In many cases it becomes undesirably bassy or "tubby." Most of the explanation for this lies in the relationship between the setting of the volume-control knob (which determines the amount of bass boost) and the acoustic sound pressure at the listener's ear.

In other words, the physical setting of the volume/loudness control knob establishes a certain amplifier frequency-response curve, but the circuit designer has no way of knowing the level of the input signal, which is what ultimately determines the setting of the control. The wide variations possible in program level make the achievement of the "correct" loudness an unlikely occurrence. The relationship between power-amplifier gain, power output, and speaker efficiency, to say nothing of listening-room acoustics, is quite unpredictable. With the factor of varying program levels, we have a situation.
with many unknowns and no general solution. There have been some amplifiers with two volume controls—one "flat" and the other compensated. The relative settings of the two controls permitted the user to establish almost any degree of compensation for any acoustical loudness level. This, or the use of separate input-level controls for each program source, was the most practical method of achieving the claimed benefits of loudness compensation (if, indeed, they can be achieved at all). However, these facilities are not at all common today, and most people did not use them correctly even when they were present.

Since almost all loudness-compensation circuits can be switched out, you can easily determine for yourself whether you are satisfied with their effects. (A few amplifiers and receivers have been made with non-defeatable compensation, which I consider a grievous mistake, but they are now fortunately very rare.) If you find the sound of your system too muddy with the loudness compensation switched on, try leaving it off and use your bass tone control to achieve the desired result. Many tone controls can lift the low bass without adding undesirable heaviness to the sound. In fact, one manufacturer (Acoustic Research) deliberately omits loudness compensation from their amplifier and receiver and recommends using the tone controls for the purpose. Their tone-control characteristics are especially well chosen, and I have found the results very agreeable. However, the best-sounding loudness compensation for any one individual's ears will probably be "produced" by correct adjustment of one of the five-band (or more) equalizers discussed last month.

Some loudness-compensation circuits boost the high frequencies as well as the lows as volume is reduced. The theoretical basis for this has been argued, pro and con, at some length. Since, in my estimation, the whole concept of loudness compensation is already on very shaky theoretical ground, I suggest a pragmatic approach. If you like the way bass boost alone affects the sound, the argument is ended. If not, you have the option of using the treble as well as the bass tone control. That's what they are there for.

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**EQUIPMENT TEST REPORTS**

By Hirsch-Houck Laboratories

**BSR 610/X AUTOMATIC TURNTABLE**

The BSR McDonald 610/X is described by its manufacturer as a "total turntable package." The name is well chosen, for it consists of a ready-to-use automatic record player on a base (with dust cover), and a Shure M93E elliptical-stylus cartridge installed in the tone arm. On the front of the base is an illuminated switch that, if desired, enables the record player to shut off the power to the associated amplifier or receiver automatically when the record player itself shuts off.

The BSR 610/X is a four-speed (78, 45, 33½, and 16⅔ rpm) unit with an 11-inch, cast nonferrous platter weighing 3 pounds, 7 ounces. The counterweighted arm has an easily removable phono-cartridge slide and a short straight finger lift. A single lever with STOP, START, and AUTO positions controls the operation. Another lever selects the playing speed, and a third lever sets the arm indexing for records of 7-, 10-, or 12-inch diameter. Two spindles are supplied: a short one for manual or single-play operation, and an automatic-changer spindle. A swing-away "control arm" rests on the record stack in automatic operation.

The BSR 610/X has three modes of operation, controlled by the spindle used and the position of the swing-away record-stabilizing control arm. For automatic play, the long spindle is inserted, discs are placed on it, and then the control arm is lowered onto the stack of records. Pushing the operating lever to AUTO places the unit in operation, and it shuts off (together with the amplifier or receiver, if the "power-control" feature of the turntable base is activated) when the last record has been played. The record-change cycle takes 9 seconds—a relatively short time.

For semi-automatic play of a single record, the short spindle is used and the control arm is swung out of the way to the right. Pushing the operating lever to AUTO starts the turntable and causes the arm to index to the selected record diameter. The record plays repeatedly until the operating lever is moved to STOP. For purely manual operation, the overhead control arm is swung to the rear and a record is placed on the turntable. Pushing the operating lever to START turns on the turntable and releases the arm restraint. The pickup must be placed on the record manually, but after playing, it returns to the rest automatically and the unit shuts off. When the arm returns to its rest, an automatic locking device is activated, which provides an effective safeguard against the arm's being accidentally dislodged.

After the arm is balanced, any tracking force from 0 to 6 grams can be dialed in with a calibrated control. An adjustable anti-skating control near the tone-arm base has separate calibration scales for conical and elliptical styli, with a range of 2 to 6 grams for the former and 2 to 4 grams for the latter. A damped cueing lever can raise or lower the pickup at any time during play. The BSR McDonald 610/X Total Turntable Package, with base, dust cover, and cartridge, ready to play, has a minimum advertised price of $99.95.

Use Tests and Measurements. The recommended range of tracking forces for the Shure M93E cartridge that (Continued on page 28)
Specifically, the leading consumer testing publications have continually top-rated Sherwood receivers over all others. Our S-8900 shown here leading the pack is no exception.

Of course, we worked hard to get those ratings.

The S-8900 has a powerful 225 watt (± 1dB) amplifier (48 watts RMS per channel at 8 OHMS). FM distortion is the lowest in the industry—0.15%. There's an impressive 3 year parts warranty, plus 1 year labor, too.

The S-8900 features solid-state ceramic FM IF filtering. Exclusive FET FM interchannel hush control. A zero-center tuning meter. There's an extra front panel tape record/dubbing jack. And six pushbuttons for every effect you could possibly want.

At $399.95, our S-8900 gives more top-rated quality than any comparable or lower priced model.

That's what we've always said. Only now you don't have to take our word for it.


SHERWOOD SOUNDS EXPENSIVE
comes with the 610/X is 1½ to 3 grams. We found that the cartridge when mounted in the 610/X arm was able to track the highest velocities on our test records with negligible waveform distortion at 2 grams, and this force was used throughout our tests. With the tracking-force dial set to 2 grams, the actual measured force was 2.25 grams; at a 3-gram setting it was 3.3 grams. The force increased by an insignificant 0.3 gram at the top of a ½-inch stack of records. Like most anti-skating devices we have tested, this one had to be set about 1 gram higher than the suggested value for best compensation. The cueing lever worked very smoothly, with slight damping on the lift and a well-damped lowering action. It returned the stylus accurately to the groove from which it was lifted.

The arm tracking error was nearly zero at radii of 2 and 6 inches, and it was always under 0.7 degree per inch elsewhere, which is quite satisfactory. A slight cartridge-tone arm resonance of about 1.5 dB was found at 10 Hz. The turntable speed was almost exact (very slightly fast), and did not change with an increase in record load or changes in line voltage from 90 to 135 volts.

The wow and flutter were 0.15 and 0.035 per cent at 33⅓ rpm, 0.2 and 0.05 per cent at 45 rpm, and 0.12 and 0.04 per cent at 78 rpm. Combined vertical and lateral rumble was -25 dB, and lateral rumble alone was -27 dB (NAB unweighted measurements). A measurement using a wave analyzer indicated that the rumble was almost entirely at a frequency of 30 Hz.

- **Comments.** The BSR McDonald 610/X operated smoothly and flawlessly at all times, and we experienced no difficulty from external shock and vibration. From the range of antiskating adjustments, it appears that the machine was not designed for operation at tracking forces under 2 grams, but at that force it had no difficulty. The Shure M93E cartridge is an excellent choice for 2-gram operation, and its overall sound quality when installed in the 610/X left little to be desired.

The measured wow was slightly higher than we have found in some of the more expensive automatic turntables, but well within hi-fi standards. It was never audible during our use of the system. The rumble figures were also higher than we would have expected from the construction and general design of the 610/X. However, try as we might, we could not induce any serious audible unpleasantness—even when we applied heavy bass boost with the amplifier tone controls. The wave analyzer provided a clue to the reason for this—the rumble is almost pure 30 Hz, with little or no energy below or above that frequency. (Rumble frequencies below 30 Hz could cause excessive speaker-cone flutter, whereas rumble frequencies much above 30 Hz would be quite audible.) Even with speakers having appreciable response at 30 Hz, there was little audible rumble. To be sure, at very high playing levels, it could be heard, but it really had to be listened for.

The concept of a “total turntable package” is not a new one, but it has considerable merit. And BSR has certainly produced an easy-to-operate, fine-sounding record player in the 610/X.

For more information, circle 156 on reader service card

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**KENWOOD KL-5060 SPEAKER SYSTEM**

- **The** Kenwood KL-5060 is a three-way, 8-ohm speaker system in a ported walnut enclosure with a handsome metal grille. It measures 25½ x 15 x 11¾ inches and weighs 44 pounds. A 12-inch woofer operates up to 600 Hz. A 6½-inch mid-range cone driver operates from 600 to 5,000 Hz, where it crosses over to a pair of circular horn-loaded tweeters. Separate level controls are provided for the mid-range and tweeters. Although the size and weight of the Kenwood KL-5060 would permit its use on a sturdy bookshelf, it should serve as well standing on the floor. Kenwood’s power recommendation for the speaker is 60 watts. It sells for $139.95.

- **Laboratory Measurements.** Listening to the KL-5060 before making any tests, we were struck by its smooth, unstrained sound quality. The indicated “normal” positions of the level controls seemed to provide a satisfactory tonal balance on most program material, although we felt that the bass sounded somewhat heavy compared with that of a number of other speaker systems we have tested.

To check the KL-5060’s frequency response we averaged the outputs of eight microphones in our “live” test room to obtain a response curve from 300 to 15,000 Hz. Below 300 Hz the output of the KL-5060 was compared with that of a calibrated reference speaker to obtain a response curve close to what would be measured in an anechoic environment. Other measurements were made of the polar response, tone-burst response, low-frequency distortion, impedance variation with frequency, and the effect of the level controls on the system’s frequency response.

The final composite response curve was unusually smooth and free of holes or peaks. It had a gradual, fairly uniform downward slope with increasing frequency, with the 10,000-Hz output being about 8 to 10 dB below the maximum output, which occurred at about 80 Hz. The measured flatness of the response curve was considerably improved when both level controls were set to maximum, which resulted in a response of ±3 dB from 100 to 12,000 Hz (very good for a speaker system). The bass output rose 3 dB at 80 Hz, and was down 3 dB from the mid-range level at 50 Hz. This curve confirmed our listening impres-

(Continued on page 30)
We've shortened the distance between you and the music.

Now you can really snuggle up to Schumann. When you get next to our new stereo receiver, the SA-6500.

Because we cut down the distortion. By cutting out the input transformer, the output transformer and the output capacitor. So instead of putting your music through a whole electronic maze, we put it right through. Via direct coupling. With less than 0.5% distortion. And an amplifier frequency response of 10 to 100,000 Hz—1dB.

And because the signal doesn't get capacitated and transformered to death, you get something else. Full 200 watts of power (IHF) all the time.

The music is more than just close, it's sharp. Because we've got 1.8 µV sensitivity on FM from two 4-pole MOS FET's that can pull in your favorite station. So it sounds like it's being broadcast next door. Even if it's coming from the next state.

We also have selectivity. Because of two RF stages, a four-section tuning capacitor, four tuned circuits and an IF stage with a crystal filter and integrated circuit.

Having brought you closer to the music, we also bring you closer to absolute control. With linear sliding controls for bass and treble. Low Filter, High Filter, and Loudness switches to shape the sound. An FM Muting switch to eliminate annoying inter-station noise. And pushbutton audio controls. There's even more. Like a linear FM dial scale with maximum station separation, for easier tuning. And dual tuning meters to measure FM/AM signal strength and pinpoint FM stations. Plus Lumina-Band tuning to light them up. A full range of input and output jacks. Even a rich walnut cabinet.

Now that our SA-6500 has shortened the distance between you and the music, all you have to do is shorten the distance between you and your nearest Panasonic Hi-Fi dealer.
The tone-burst performance of the KL-5060 was quite good. Shown are oscilloscope photos taken at (left to right) 80, 1,500, and 7,100 Hz.

sions, since the bass heaviness we had noted did not have a "tubby" quality (the usual result of a rise in output between 100 and 300 Hz), but rather a more solid bass produced by the elevated output in the 60- to 80-Hz region.

The polar response (dispersion) of the KL-5060 was quite good, as was the speaker’s response to tone-burst test signals throughout the speaker's frequency range. System impedance was very uniform; it varied between 6.5 and 10 ohms from 20 to 20,000 Hz, except at the low-frequency system resonance (65 Hz), where it rose to 20 ohms. At a 1-watt test-signal drive level, the low-frequency distortion began to rise rapidly below 50 Hz, where it was 5 per cent. Increasing the drive to 10 watts had only a slight effect on the distortion above 60 Hz, and 5 per cent distortion was measured at 55 Hz.

We found the KL-5060 to be 5 to 8 dB more efficient than the usual acoustic-suspension system. This would permit it to be used to good advantage with the less expensive, modestly powered receivers and amplifiers (10 to 20 watts per channel) that are rather underpowered for driving acoustic-suspension systems.

Listening Tests. The Kenwood KL-5060 is one of the smoothest and most listenable speakers we have heard in some time, especially if you like a solid bass "feel" in your sound. Although it is not strong in the very lowest bass octave (there is not much musical content down there anyway), the speaker certainly has no subjective lack of bass. On the other hand, in a room whose resonances tend to reinforce bass response, this speaker might be undesirably heavy-sounding. This risk exists with any speaker, of course, but not all speakers begin with an enhanced output in that frequency range.

The simulated live-vs.-recorded listening comparison completely confirmed our initial subjective impressions and subsequent measurements. The most accurate reproduction was obtained with both level controls set to their maximum positions, resulting in outstandingly fine mid- and high-frequency response. The KL-5060 ranks with the four or five best speakers we have tested with this very revealing technique. Since the test excludes frequencies below 200 Hz, the low-frequency characteristics of the speaker did not affect the results.

Above and beyond its audible merits, the KL-5060 is a very attractive piece of furniture (a personal opinion, of course), especially when you consider the limited amount of styling possible in a simple rectangular-box format.

For more information, circle 157 on reader service card

TANDBERG 3000X STEREO TAPE DECK

- TANDBERG's Model 3000X is a moderately priced ($299) stereo tape deck that closely resembles in design and performance the more expensive Model 6000X. The 3000X is a three-speed (1½, 3⅛, and 7½ ips) single-motor machine, with separate playback head for off-the-tape mon-
Lift this page and drop it... you’ll see how gently the Miracord 50H treats your records.

A gentle touch of the push-buttons brings forth a gentle reaction from the Miracord 50H. The dynamically balanced arm responds gently with its frictionless bearing system, faithfully and flawlessly tracking the intricate record grooves. Gentleness, however, is just one attribute of the 50H, a clue to its superior performance is found in its features.

Stylus overhang adjustment is essential for optimum tracking. Another automatic turntable does feature this adjustment, but it’s internal and difficult to set. The Miracord 50H offers external overhang adjustment with built-in gauge no shifting, no guesswork, no templates.

Other turntables offer a kind of synchronous motor. The 50H uses a Papst hysteresis synchronous motor with outer rotor for unvarying speed accuracy regardless of the voltage fluctuation or loads. The Papst motor is usually found in professional studios.

Consider cueing: in one leading automatic turntable, cueing does not operate in the automatic mode. In automatic, cueing is the ideal way to interrupt play for a moment when there is a stack of records on the spindle. The 50H provides silicone-damped cueing in both automatic and manual modes.

Another important feature is the 50H turntable. It is a heavy, one-piece, non-ferrous metal casting, lathe-turned to precise dimensions and then individually dynamically balanced. This contributes to the smooth, steady motion of the turntable, free of rumble, wow and flutter.

Nothing we can say short of experiencing it yourself can better describe the gentle way in which the Miracord responds and preserves the best in your records. Find out for yourself. Miracord 50H, $175 less cartridge and base. Miracord feathertouch automatic turntables start at less than $100. Benjamin Electronic Sound Corporation, Farmingdale, N.Y. 11735/a div. of ISC/available in Canada.

Miracord 50H

APRIL 1971  CIRCLE NO. 49 ON READER SERVICE CARD
The output selector switch feeds the original program source, the stereo signal from the playback preamplifiers, or a mono signal from either playback channel to both output jacks. In the rear of the recorder, in addition to the input and output jacks, there is a three-position slide switch that connects either the left- or right-channel playback-preamplifier output to the line input of the left channel for special effects such as sound-on-sound and echo. An instantaneous start/stop switch functions as an effective "pause" control.

- Laboratory Measurements. Since the heads, electronics, and basic transport mechanism of the Tandberg 3000X are essentially identical to those of the 6000X, it was not surprising to find that this machine duplicated the remarkable performance of its de luxe relative. With the recommended 3M Type 203 low-noise tape, we measured the 7½-ips record-playback frequency response at an astonishing ±2 dB from 35 to 26,000 Hz (rated ±2 dB from 40 to 20,000 Hz). Equally impressive was the performance at 3½ ips, where the frequency response was within ±2.5 dB from 35 to 21,000 Hz (rated ±2 dB from 50 to 16,000 Hz). The response at 1½ ips was not quite as wide as we measured previously on the 6000X, probably because of normal production tolerances in heads and equalization. Nevertheless, it was essentially within ±3 dB from 35 to 10,000 Hz (rated ±2 dB from 50 to 9,000 Hz), which surpasses the performance of any other reel-to-reel recorder we have tested at this speed—except, of course, that of the Tandberg 6000X.

Over the range checked by the Ampex quarter-track test tapes, the playback frequency response of the 3000X was similar to that of the 6000X (±1.5 dB from 50 to 15,000 Hz at 7½ ips, and ±2.5 dB from 50 to 7,500 Hz at 3½ ips). Wow and flutter were 0.025 and 0.13 per cent at 3½ ips. At 7½ ips, they were 0.02 and 0.12 per cent. Since there is no standard low-speed flutter test tape, we measured the combined record-playback wow and flutter at 1½ ips. They were 0.07 and 0.20 per cent, respectively.

Although the signal-to-noise ratio of the 3000X is rated by Tandberg at 3 to 4 dB poorer than that of the 6000X (which has established a reputation as one of the quietest home tape recorders available), in our measurements the two were identical. The unweighted signal-to-noise ratio was 50 dB at 1½ ips and 53 dB at the other speeds, referred to the 0-dB recording level indicated on the meters. The distortion at this level was 2.6 per cent at the slowest speed, and 1.5 per cent at the other speeds. If the signal-to-noise ratio is referred to the customary reference level corresponding to 3 per cent distortion, it becomes 51 dB at 1½, 55 dB at 3½, and 57 dB at 7½ ips. The signal-to-noise ratios were the same for the microphone and line inputs. Crosstalk between channels at 1,000 Hz was ~52 dB.

To develop a 0-dB recording level, an input of 95 millivolts was required on the high-level line inputs, and only 5 millivolts was required on the low-level line inputs. The microphone input required 0.2 millivolt for a 0-dB level. The playback output corresponding to a 0-dB recording level changed with the tape speed. At 7½, 3½, and 1½ ips, it was 0.75, 0.63, and 0.41 volt, respectively. The operating tape speeds were exact, and fast wind and rewind handled 1,800 feet of tape in 2 minutes, 8 seconds.

- Comments. When we reviewed the Tandberg 6000X (STEREO REVIEW, June 1970), we commented that it was hard to see how its performance could be significantly improved. Evidently Tandberg's engineers came to the same conclusion, but elected to bring the same performance into a lower price range. They have succeeded admirably.

It is fair to ask why there should be a $200 price difference between the 3000X and the 6000X, since they are almost exactly alike, both in sound and measured performance. A comparison of their features answers the question. The 3000X has an induction motor, as compared with the hysteresis-synchronous motor of the 6000X. This may give it slightly less constant speed under a variety of tape-leading conditions, but we couldn't measure any difference on our sample. The special-effects switch (for sound-on-sound, echo, etc.) of the 3000X is in the rear instead of on the control panel—hardly an important consideration. Instead of a solenoid-operated instantaneous stop/start switch, affording the optional possibility of remote control, the 3000X has a simple, manually operated knob. We could hear the not-quite-instantaneous start as a slight 'churp' when the tape was put into motion.

The 3000X does not have an RIAA-equalized phone input, which few will miss, nor does it have separate microphone inputs with mixing capability (a disadvantage in many cases). The absence of playback-level controls and meter indication on playback might be considered a minor disadvantage. Finally, the excellent peak-limiting circuit of the 6000X has been omitted from the 3000X. It may not be missed by the average home recordist, but only because he has never enjoyed the convenience of using a tape recorder such as the 6000X that cannot be driven into distortion. The headphone output of the 3000X will drive most 8-ohm phones to a satisfactory, but not sufficient, level.

As for listening quality, everything we said about the 6000X applies equally well to the 3000X. At 7½ ips, white noise emerged from the record-playback process absolutely unaltered in sound; at 3½ ips, a very slight change could be heard. At either speed, no program originating from records or FM radio was changed in any audible way—including the background noise—because of the outstanding signal-to-noise ratio of the Tandberg 3000X.

At 1½ ips a slight loss of highs could be perceived, and at moderately high playback levels some hiss could be heard during low-level passages. In this respect the 3000X was comparable to a good Dolbyized cassette deck. It could, of course, be made even better by the addition of an external Dolby unit.) At the higher speeds, it is doubtful if (Continued on page 34)

STEREO REVIEW
Arthur Fiedler has chosen AR-5 speaker systems for use in his home.

For over 40 years, Arthur Fiedler has been conductor of the Boston Pops Orchestra. His recordings with the Pops have made him known to music lovers all over the world. Mr. Fiedler has chosen AR-5 speaker systems because their advanced design contributes to accurate reproduction of the original program material. Here, in his Brockline, Massachusetts, home, he auditions his latest Polydor recordings over an AR music system consisting of two AR-5 speakers, an AR FM receiver, and an AR turntable with Shure V-15 type II cartridge.

ACOUSTIC RESEARCH, INC.
24 Thorndike St., Cambridge, Mass. 02141, Dept. SR-4

Please send me a free copy of your illustrated catalog, as well as technical specifications and measured performance data for the AR-5 speaker systems.

Name

Address
the Dolby would help much, since the background-noise level of most program sources exceeds the noise introduced by the recorder. Even if the slow-speed frequency response of the 3000X is not quite the equal of that of the best of the cassette recorders, it comes very close. In addition, the 3000X retains all the advantages of the open-reel format, such as ease of editing and splicing, and very long playing time at the excellently performing slower speeds.

And, as we have said, a better-sounding recorder would be hard to find at any price. You will have to decide for yourself whether the absence of some of the flexibility and operating niceties found in a few competitively priced machines is a justifiable trade-off against the really exceptional record-playback performance of the impressive Tandberg 3000X.

For more information, circle 158 on reader service card

CASSETTE DECKS REVISITED

In our recent fourteen-page survey of seventeen cassette decks (Stereo Review, November, 1970), we pointed out that several of the test samples were prototypes or early production units that might differ in some respects from later production models. Regular production units of the Harman-Kardon CAD-5 and Teac A-24 decks were subsequently submitted and retested, and our findings are given in brief below. For a full analysis of the features and functioning of all the decks, readers are referred to the original article. (The November 1970 issue is available for $7.50 postpaid from the Ziff-Davis Service Division, Department BCSR, 595 Broadway, New York, N.Y. 10012.)

Harman-Kardon CAD-5. The original CAD-5 sample had apparently been factory adjusted for standard tape formulations; current-production decks are biased for high-density tape (specifically TDK SD). We found the record-playback frequency response of the second CAD-5 to be slightly improved over the already excellent performance of the first sample. With TDK SD tape it measured ±1.5 dB from 45 to 15,000 Hz on one channel and ±1.5 dB from 50 to 15,000 Hz on the other channel. With the Dolby circuits operative, there was approximately 1 dB more output in the range above 2,000 Hz, but the general shape of the response curve was not affected.

Our second unit had slightly more wow and flutter (0.1 and 0.24 per cent, respectively) than the first, but in this respect it was still very satisfactory. Like a number of the previously tested decks, it could not tolerate high recording levels without distortion. (Incidentally, this is not a problem with the Dolby circuitry per se.) Harman-Kardon recommends a maximum recording-level meter reading of -2 dB. The measured 1,000-Hz harmonic distortion at -3 dB was about 3 per cent, dropping to 2.2 per cent at -6 dB and increasing to over 5 per cent at 0 dB on the meters.

Considerable caution was required in setting recording levels, and we found it best to err on the low side (-3 dB to -5 dB for most program peaks) to avoid distortion.

The signal-to-noise ratio, without the Dolby circuits switched in, was 47 dB for both units, referred to 0 dB. However, because of limitation in the maximum recording level, the effective signal-to-noise ratio was more nearly 45 dB—which is still quite respectable for a cassette deck operating without Dolby noise reduction.

Switching on the Dolby circuits improved the measured signal-to-noise ratio only slightly—to 50 dB. The noise, however, was not hiss, but hum, induced in the playback head by the CAD-5's power transformer. The transformer orientation is adjustable for minimum hum, but was evidently not set correctly on the second sample (and possibly not on the first, either). With repositioning of the transformer, the hum level dropped substantially. At that point, we were able to measure the actual hiss reduction achieved by the Dolby circuits as a significant 8 dB.

Subjectively, the second CAD-5 was typical of the state of the art in cassette recorders. It could copy disc records with only the faintest increase in hiss to distinguish the copy from the original. In the case of FM broadcasts, the original program came through unmodified in any way we could detect by ear.

Teac A-24. The production-model Teac A-24 had an appreciably different record-playback frequency response (and sound) from the first unit we tested. The original pre-production model had a strongly accentuated high-end response, with a definitely bright, hard sound. The response of the second unit was very smooth with TDK SD tape—within ±3 dB from 30 to 10,300 Hz. The harmonic distortion at all levels was appreciably lower than we had previously measured—2.2 per cent at 0 dB, 4.1 per cent at +3 dB, and 1.7 per cent at -3 dB on the record-level meters. All other characteristics were essentially the same on both units.

The listening quality of the newer A-24 was much improved. It had very low noise, and a clean, undistorted sound. In a playback comparison with a high-quality disc recording which we copied on the A-24, the cassette sound had a minute dulling of the extreme high frequencies, detectable only by an A-B comparison with the original program. Teac reports that the price of the A-24 has been reduced to $179.50.

Bogen CRP. It has been called to our attention that production models of the Bogen CRP cassette deck have illuminated and calibrated level meters. On the unit that was tested, a pre-production model, a different meter was used.

For more information, circle 158 on reader service card
An Alternative For The Discriminating

You like good sound but can't decide which component system is best. Lafayette offers a choice of an all-in-one award winning receiver or a separate amplifier or tuner of equivalent quality. Each is designed to meet your requirements for space, top notch sound and best of all, durability at an award winning price.

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The LR-1500TA the award winning receiver by acclamation of the critics. This all-in-one unit has a powerful 240 watts of power ± 1db. "Acritune" provides for precision, no guess work tuning and Computor-Matic T.M. gives you automatic overload protection. The LR-1500TA has all the controls you will ever need for superb performance. Reliable sophisticated electronic circuits. Distinctively styled to enhance any decor. Stock No. 99-0195JWUX $299.95

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The LA-125B solid-state stereo amplifier with 160 watts of power ± 1db is powerful enough to drive two sets of stereo speakers at the same time. The LA-125B has many deluxe features including: front panel headphone jack, high and low gain phono and tuner inputs, a speaker mode switch, front and rear tape output jacks, and special remote speaker terminals. The LA-125B is beautifully styled and comes complete with walnut finish metal case. Stock No. 99-02305WX $129.95

SOLID STATE STEREO TUNER
The LT-725A, a solid-state AM/FM stereo tuner with its distinctive styling will complement the LA-125B stereo amplifier. The LT-725A is priced within the budget of the music lover. Buy it now or add it to your music system later. High (1.7μV) sensitivity and 1.5db capture ratio assures pulling in stations near and far. Includes: front and rear panel tape output jacks, illuminated signal strength tuning meter, automatic stereo switching and stereo indicator light. Stock No. 99-022907W $99.95
Tone-Arm Adjustment

Q. I understand the importance of correct tone-arm tracking, but I don’t know how to check its accuracy on my own record player. Is there a way?

ROBERT KASSELL
Huntington, L.I., N.Y.

A. There is, but first, for those readers who are not familiar with the problem and its solutions, here’s a brief recapitulation. Initially we have to look at the record-cutting lathe, which is the device that engraves the groove in the lacquer master disc. This master disc serves as a prototype, and if things go right, all the subsequent commercial vinyl discs are exact copies of it.

The “tone-arm” part of the cutting lathe is a massive structure that mechanically drives the cutting head radially across the rotating blank lacquer disc. That means the cutter at all times maintains exact tangency to a circle whose center is the spindle hole. In that fact lies the source of tone-arm tracking error in playback. With but few exceptions, all tone arms are pivoted at one end, and therefore in tracing the record groove they do not follow a true radial path, but rather ascribe a shallow arc. The deviation from a radial path—or from true tangency, whichever way you care to look at it—is the source of tracking error, which is logically measured in degrees of deviation. Insofar as the playback stylus does not have the same physical relationship to both groove walls as the cutting stylus did, its motion will not accurately reflect the actual groove undulations; in other words, it will distort the signal. The question is complicated by the fact that the tighter the arc of the groove, the greater the distortion for a given degree of tracking error. It works out that distortion is directly proportional to the tracking-angle error in degrees per inch of record radius. Therefore, a 3-degree error at a 6-inch radius (the outer edge of a record) produces the same amount of distortion that a 1.5-degree tracking error produces at a radius of 3 inches.

How important is tracking-error distortion from a listening standpoint? As in any area where the acuity of one expert’s ears is pitted against that of another, you’ll find disagreements. The mathematically calculated distortion for a recorded signal of normal level and a tracking error of, say, 0.7 degree per inch is about 3 per cent. Admittedly that figure seems quite high, but the situation is alleviated somewhat by the fact that the distortion is basically second-harmonic, which lacks the high irritation quotient of higher-order distortions. And in addition, the other distortions inherent in the recording/playback process probably have a masking effect.

In any case, any adjustment that can help reduce even theoretical distortion is worth considering, and so we have prepared the template shown below. Mount the template on thin cardboard using rubber cement. Carefully cut out hole A so that it fits tightly over the spindle of your turntable. If in cutting the hole you make it slightly oversize, the concentric circles will nevertheless enable you to align the template properly. Make a pin hole through the template at the 2.5-inch radius point (along line A-B) indicated by the four arrows. Make sure that the cartridge is installed in the tone-arm shell in such a way that it is as nearly parallel to—and equidistant from—the sides of the shell as possible.

Place the template over the spindle and position it so that the stylus tip enters the pin hole. Depending upon the design of the tone arm, adjust its length, base-mounting assembly, or cartridge position so that, when viewed from above, the sides of the tone-arm shell are parallel to (or at least positioned symmetrically between) the parallel lines. By thus setting the arm for zero tracking error at this inner radius point, you will ensure minimum tracking-error distortion over the playing area of the disc.
The $299 speaker for the man who is dying to spend over $1000.

It's a familiar scenario. Rich and idealistic audio perfectionist, his pockets bulging with large bills, sets forth to possess the ultimate loudspeaker and expenses be damned. Sees and listens to giant corner horns, full-range electrostatics, theater systems, wild hybrids with electronic crossovers. Suddenly realizes that a perfectly straightforward, not excessively large floor-standing system priced at $279 sounds as good as, or better than, any of the exotics. Common sense prevails over conspicuous consumption; he buys the Rectilinear III; saves three fourths of his money.

So, for an extra $20, we turned the Rectilinear III into a stunning lowboy and added a magnificent fretwork grille. In this $299 version it has true visceral appeal, more like a luscious mistress than a handsome wife.

Of course, both versions are identical acoustically and electronically. Both are built around the same 12" woofer, 5" dual-cone midrange driver, two 2½" tweeters and two 2" tweeters, and the same ingenious crossover network. Therefore, necessarily, both sound the same.

But the look of the $299 lowboy makes it easier to forgive yourself that you didn't spend over $1000.

(For more information, including detailed literature, see your audio dealer or write to Rectilinear Research Corp., 107 Bruckner Blvd., Bronx, New York 10454. Canada: H. Roy Gray Co. Ltd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main Street, Freeport, New York 11520.)

Rectilinear III Lowboy
THE GREAT

A NEW STANDARD OF EXCELLENCE

Some time ago, Sansui engineers were given a blank check. "Create the finest receiver in the world today," they were told. "Put in everything you ever wanted to see in your own equipment." And that's what they did. Today the Sansui EIGHT is a reality—the proudest achievement of a company renowned the world over as a leader in sound reproduction.

Take the features. Take the specs. Compare the Sansui EIGHT to anything you have ever seen or heard. Go to your franchised Sansui dealer today for a demonstration of the receiver that will become the standard of excellence by which others are judged. $499.95.
1. Ultrasensitive FM Front End Two RF amplifiers and a mixer amplifier use three costly, low-noise, dual-gated metal oxide silicon field-effect transistors (MOSFET's) and a 4-gang frequency-dependent dual-filament design. These combine to give the EIGHT its great edge in such areas as FM intermodulation distortion, sensitivity (1.7 microvolts (IH), signal-to-noise (better than 65 db) and image frequency, if and spurious-response rejection (at all better than 100 db).

2. Three-IC IF Amplifier with Crystal/Block Filter A three-stage differential amplifier, executed with integrated circuits, is combined with a sharply selective crystal filter and a block filter to give steep-sided response. This helps keep distortion very low. (FM harmonic distortion is less than 0.5%), improves capture ratio (1.5 db) and stereo separation (better than 35 db at 400 Hz) and minimizes phase shifts.

3. Sharp-Cut Multiplex Carrier Filter A two-stage LC-sharp-cut filter really keeps the subcarrier out of the audio circuits. Where some leaks through, as in most FM receivers, you get increased intermodulation distortion and interference with the bias oscillator of tape recorders, which then mars all-off-air home recordings.

4. AM Muting Switch and Adjuster The switch cuts off all interstation hiss during tuning, if you wish. The level adjuster permits precise setting to cut off (or avoid cutting off) weak stations, as desired.

5. FM Linear-Scale Wide-Dial Design The linear scale is uniformly graduated in 250-kHz steps. The blackout design features a smoked glass threeway design-in all colors. The illuminating dial is in use. The illuminated dial pointer blurs out during non-use of the tuner.

6. Large Tuning Meters For pinpoint accuracy, one meter indicates signal strength (on FM or AM) while the other indicates exact FM center frequency-selectively. A high-impedance antenna circuit also helps reduce interstation interference.

7. Dual Impedance Antenna Terminals The usual 300-ohm balanced antenna input, plus a 75-ohm unbalanced input for the coaxial cables used in remote or noisy areas, or in master/antenna distribution systems.

8. FET AM Tuner Most receiver designs ignore AM capability. The EIGHT uses two FET's along with a 3-gang tuning capacitor for high sensitivity and selectivity. A high-impedance antenna circuit also helps reduce interstation interference.

9. Unique Panograph Antenna A dual swivel arm antenna for home or mobile use, lets you draw the large AM bar antenna away from the chassis and orient for best reception, or fold it into the back panel to protect it against mishandling.

10. Smooth-Tuning Dial Pointer A large flywheel plus a precision nylon gear permit accurate, velvet-smooth tuning action and prevent skipping or jamming.

11. Three-Stage Equalizer Amplifier Emitter-to-emitter negative feedback is used in a three-stage amplifier realized with silicon transistors chosen for their low noise. The results: improved stability, excellent signal-to-noise ratio, negligible distortion, high stability and extremely large dynamic range which will handle cartridges with very high and very low output levels.

12. Multi-Deck Tape Capability Two tape monitor circuits are brought out to a choice of pin-jack and 3-contact phone-type terminals on the front and rear panels. Play, record and monitor on either circuit. Or copy from one deck to the other via the Tape Monitor Switch.

13. Negative-Feedback Control Amplifier To minimize distortion, the tone-correct circuit is driven by a two-stage circuit using both AC and DC negative feedback.

14. Triple-Tone Crossover System Separate controls for bass, treble and midrange. And they're not the regular continuous controls. Each is an 11-position switch carefully calibrated in db steps of boost and cut for the same adjustment precision used in studio work.

15. Sharp-Cut High and Low Filters Both high and low-frequency filters use special transistors in emitter-follower-negative-feedback circuits to provide sharp cutoff (12 db/octave) for maximum efficiency.

16. Direct-Coupled Power Amplifier A two-stage differential amplifier is directly coupled to a complementary Darlington amplifier that uses no output capacitors and is driven by two power supplies, positive and negative. Negative stage amplifier utilizes positive feedback at all frequencies, beyond the upper limits of audiability and down into the DC range—and the damping factor holds up very steadily down to the extremely low frequencies. The result: drastic reduction of intermodulation distortion not only in the amplifier itself, but in any speaker system connected to it.

17. Jumbo Filter Capacitors Two enormous power-supply capacitors—8000 microfarads each—contribute to the extraordinary specifications of the EIGHT. 200 watts of IF music power, 80 watts continuous power per channel. Distortion factor of 0.3% at rated output. Power bandwidth of 10,000 Hz (at levels of normal use, way down to 5 Hz and up to 50,000 Hz, ±1 db). Even when driven to maximum output, the EIGHT will deliver the cleanest, most distortionless sound you have ever heard.

18. King-Size Heat Sink No overheating transistors even with continuous drive to maximum output.

19. Total Protection Extra transistors are used in a special power transistor circuit designed for temperature compensation. A special stabilizing circuit balances the differential amplifier, a power-limiting circuit and six quick-acting fuses protect the power transistors against overcurrent. And a completely separate circuit, using a silicon-controlled rectifier (SCR), safeguards your speakers against any possible damage.

20. Separable Pre- and Power Amplifiers Not only can the preamplifier be electrically separated, but the option can be used simply by flicking a front-panel switch. Use them separately to connect electronic crossover networks. Or separate them to use the preamp as a versatile control amplifier for tape recording or studio-type work while the power amplifier acts as a line or main amplifier.

21. Three-System Multi-Mode Speaker Capability Connect up to three speaker systems and switch-select any one or two different combinations of two. A special mode switch for one of these outputs permits it to drive two monophonic speakers for monitoring, or it can be used with a center-channel of a stereo pair.

22. Stereo Balance Check Circuit Turn on the Balance Check, and each of the two inputs will be connected together in a 10-kHz bridge circuit and the last four separately stabilized to eliminate power fluctuation. This isolation blocks the interaction between one section and another that degrades performance in most integrated receivers. The Sansui EIGHT thus performs like a combination of a separate tuner, control amplifier and power amplifier.

23. Plug-in-Board Functional Construction Each functional section is on its own printed-circuit board that plugs into the main chassis. This simplifies service—that is, if you should ever need service.

24. Mode Switches Flick a switch to change from stereo to mono. Flick another to choose between normal and reverse stereo.

25. Two Phone Inputs Accommodate two phonograph turntables at the same time, or choose either input for ideal match to one cartridge.

26. Separate Input Level Adjusters Back-panel inputs are for use with high-quality turntables. A special mode switch for mono also permits it to drive separate mono turntables.

27. Separate Input Level Adjusters Back-panel output is for use with high-quality turntables. A special mode switch for mono also permits it to drive separate mono turntables.


29. Universal Supply-Voltage Adaptability A changeover socket for power-supply input voltage adjusts to eight different A.C. supply-source levels, for use anywhere in the world.

30. Detachable AC Line Cord

31. Program Indicators Illuminated legends on a dark background indicate all selected functions except AM and FM. For the latter, the tuning dial and pointer take up more of the face for a better view.

32. FM Stereo Indicator Illuminated legends let you know when the FM source is transmitting in stereo; even when you’ve selected mono. FM indicator lights pink when the stereo mode is engaged.

33. Integral Walnut Cabinet No need for separate speaker cabinets. The EIGHT comes inside its own furniture-finished walnut cabinet. And it has legs that can be adjusted for a custom fit to the shelf or other furniture on which it is placed.

The Sansui Great EIGHT. The receiver for connoisseurs. Now on demonstration at your franchised Sansui dealer.
Technical Editor
Larry Klein
Examines
The New
Skinny Disc

“They’re better because they’re thinner,” says RCA

TAKE A TIME of tight money, concern for the
consumer, and semi-serious proposals that Ralph Nader might make a good presi-
dential candidate for ’72, the phonograph indus-
tory innovation that has a faster-than-usual procedure. Normal business risks are particularly compounded by the public’s developing paranoia about the products they drive, swallow, and—judging from our mail—listen to. No one has yet suggested that a defective phonograph record exposes its user to physical danger, but that fact doesn’t appear to have lessened public concern about it.

Given this situation, it appeared to some observers that RCA’s decision to produce and market at this time a phonograph record that has ⅓ of the thickness of the normal product was perhaps a little risky. Further, to take such a step without some effort to persuade the record-buying public of the virtues (real, exaggerated, or invented) of the skinny disc seemed at the very least unusually thoughtless of the jolly corporate giant (see the Editor’s column in the January issue).

Nonetheless, RCA executives apparently decided that their purposes would best be served by releasing their new Dynaflex discs in large numbers (about 12 million so far), then sitting back and monitoring (with bated breath, I would imagine) the public’s reaction. According to RCA spokesmen at a mid-January press conference, reaction to this “test marketing” was not only not adverse, it could even be interpreted as favorable.

RCA’s evaluation was based on an analysis of the number and content of complaint letters received after the release of several million of the thinner discs. There were fewer letters of complaint than would have been expected on “normal” product during a comparable period, and by far the greater proportion of the letters were of an aesthetic nature (a reaction to the “thinness” of the discs) rather than a technical one (faulty reproduction of sound).

These socio-psychological considerations aside, what is it that RCA hopes the new Dynaflex format will achieve for them and for the record-buying public? The thin record, according to RCA, has numerous technical virtues, some that will directly benefit the consumer, others that will make possible a more efficient record-manufacturing process, and these virtues (states RCA) are most evident in the area of surface noise.

What most listeners lump under the term “record-surface noise” may be one or all of the following: (1) Hiss carried over from a noisy master tape. (2) Snaps and pops caused by the dust attracted by static electricity arising during handling and playing. (3) Ticks and pops caused by extraneous matter—dirt—introduced at the factory. (4) Ticks and pops caused by microscopic, usually sub-surface, flaws in the groove. These blisters, when they appear on the surface, will usually cause the disc to be rejected during visual inspection. However, as a sub-surface phenomenon, they may be audible even when they are not visible. (5) Noise and high-frequency distortion caused either by inadequate flow of the vinyl into the microscopic groove surfaces of the stamper (known as “non-fill”), or by lack of homogeneity in the vinyl compound at the time of its pressing. (6) Miscellaneous noises arising from defects embodied in the stamper or in the vinyl compound itself.

It should be clear from the above not only that there are many factors that produce noise, but that a single solution will not suffice for all of them. It is evident, for example, that the new Dynaflex record can have no effect on items (1), (2), and (3) above, but that it could enter the picture strongly at (4) and (5). The blisters that cause ticks and pops are actually gas bubbles buried in the vinyl beneath the groove surface, or they are cracks left by the bubbles as they broke through the surface while the vinyl was still soft. The best cure for these, all record companies agree, is to get rid of the gas trapped in the vinyl “biscuit” before the molding of the record in the stamper takes place. But since, in RCA’s view, it is not possible to render the vinyl absolutely gas-free, the next best thing is to make it as easy as possible for the gas to escape during the pressing process. This the thin-disc process accomplishes by encouraging increased turbulence of the vinyl during the pressing. Increased turbulence, a by-product of the thin-disc pressing technique, can be demonstrated easily: if you take a thin record and sandwich it between two buckets of water, you will find that the sloshing about (turbulence) is greater in the one containing less liquid. (The analogy is not a perfect one, since the vinyl compound does not get “sloshed about” in the press, but pressure causes turbulence too.)

The Dynaflex process also makes possible better flow of vinyl compound in the press. This is fairly easy to understand if one imagines taking two fairly firm blocs of modeling clay, one weighing a pound or so and the other weighing 2 or 3 ounces. If each bloc is sandwiched between a pair of records and pressed, all other things being equal, the two blocs should spread easier and conform better to the grooves of the top and bottom discs (which are simulating the two halves of a stamper) than the thick one. Further, let’s say you want to make the stamping job easier by softening the clay with heat. The smaller bloc will not only heat much faster than the larger one, but will lose its heat far more rapidly afterward. Both factors are advantageous for an automated time/temperature controlled press record.

The Dynaflex approach obviously can’t do anything about the stamper defects in item (6), but RCA claims that with 45 grams less vinyl per disc, it will now be possible to use the finest compound for all record product where it was used to be reserved for premium pressings alone.

ASIDE from noise, perhaps the most common complaint about records is warpage, part being caused by bad storage conditions, part being pressed into a shape that is not easily corrected during manufacture. Dynaflex should be somewhat helpful with both of these, but to what degree it is difficult to judge at this time. The thinness of a Dynaflex record means that it can be bent, without damage, to a degree that would permanently deform or crack a disc of standard thickness. This factor has a bearing on record warpage originating through bad storage conditions. This “cold-flow” warpage can often be corrected simply by putting the warped record on a flat sur-

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The shaded area in the truncated disc cross-section above shows the relative reduction in groove-area thickness (from 0.05 to 0.03 inch) made possible by the Dynaflex process. The thinner disc uses 45 grams less vinyl, so a Dynaflex pressing weighs 90 grams as compared to the more or less standard 135 grams of a conventional record. The thickness of the outer rim and the label area is standardized by the Recording Industry Association of America (RIAA) in order to insure the proper operation of changer mechanisms and to keep the edges of a disc from drooping when placed on the small turntable platters found in cheap players.
face and weighting it down for a while with an unabridged dictionary or two. But warpa-

gage that is "built-in" to the disc by improper
temperatures during the pressing and curing
cycle is not susceptible of correction, and I
cannot, off-hand, see any reason why a Dyna-
flex disc should be any better in this respect
than a thicker one—though it certainly
should not be any worse.

FROM a technical standpoint, RCA's new
Dynaflex disc does not seem to be objection-
able. But it is there, several of our consumeris
respondents have asked, some corner-cut-
ing on the cost side that is somehow going
to give the buyer less than his accustomed
money's worth? First, there is no reason un-
der God's heaven why steps taken as an eco-
nomic necessity must result in technical re-
verses—or that they can not result in techni-
cal advances. Second, since there is no virtue
in record thickness per se, the buyer is not
necessarily being "robbed" of any vinyl he
really needs. Discs have been getting thinner
ever since they were first invented; they have
also been getting better in sound quality,
though there are undoubtedly a few 78-
diehards who would dispute even this. Third,
though RCA will now be using less vinyl per
record, they will also be using better-quality
material on all their product. Also, research
and development costs on Dynaflex have
been considerable, and must be written off
against any economic gains resulting from the
process—in other words, no enormous

profit.

Record prices were at the same level ten
years ago as they are today, something that
probably cannot be said of any other product.
As an alternative to raising prices, finding a
way to make something at lower cost without
degrading its quality can hardly be beat.
Moreover, there is more involved in Dyna-
flex than the immediate present. RCA's new
process will lend itself to completely automated operation in time; this
should not only present fewer quality-control
problems and remove the specter of possible labor shortages (record pressing plants are
hot, noisy, dirty, and unpopular in times of
full employment), but be some insurance
against possible price increases in the future.
Further, it can readily be seen that a lighter
disc will be a useful hedge against the threat-
ened increase in the postal rate for mail-ord-
er records.

At the Dynaflex press conference, RCA
supplied two discs, identical except for the
pressing process used, for purposes of direct
comparison. Though "The Best of Jim
Reeves" would not have been my first choice
of program material for comparing Dynaflex
against a conventional disc, I was able to
reach a few conclusions. Both discs had se-
vere distortion in the opening moments of
one side (which helped mask the tape his-
adible throughout), but I found the Dyna-
flex disc in no way audibly inferior to the
conventional pressing. On the other hand, I
cannot honestly say that it sounded any bet-
ter. Which brings us back to the point made
previously, that Dynaflex is no panacea for
all noise problems. But perhaps, with the Dy-
aflex hurdle behind them, RCA will now
begin to zero in on those other noise sources
that continue to plague lovers of clean high-
fidelity sound.
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THE SPEAKER AND THE ROOM

LAST MONTH I touched on how a speaker's acoustical surroundings and location will affect its sound in the dealer's showroom. Obviously, the same factors influence speaker performance at home. Some rooms are better for sound reproduction than others, and different rooms may produce different effects. In the end, the listening room can legitimately be considered as much a part of the playback system as any other component; and like many other components it can be adjusted (within limits)—by means of speaker positioning and the choice and arrangement of furnishings—to help or hinder the final result.

As noted last month, a speaker located in a corner will sound 'bassier' than an identical speaker in a mid-wall position. A speaker producing a low-frequency tone will try to radiate it in a spherical pattern with itself at the center of the sphere. Suspend it in the geometric center of a large room away from floor, ceiling, and walls and it will do just that. But hung on the wall it has only half a sphere to radiate into, so that if we neglect absorption by the wall, the same amount of energy as in the previous case is now concentrated into half the space. At the junction of two walls (or the floor and a wall) the speaker "sees" one quarter of a sphere, and on the floor in a corner (three surfaces) one-eighth of a sphere. If you like, you can think of the intersecting surfaces of a corner as forming a sort of three-sided megaphone, which also helps "couple" the energy to the air. Since the "megaphone" phenomenon has its greatest influence on low-frequency performance, it can be used to increase or decrease the bass reaching the listener without resort to zone controls, which may introduce other effects. To increase bass, move the speaker toward a junction of wall and floor surfaces; to decrease bass, move it away from such junctions, or place it in a mid-wall or mid-floor location.

Speaker location has its effect upon high-frequency response also. High frequencies are directional, and increasingly so as the frequency goes up. This means that, unless design steps are taken, it is the natural tendency of a normal speaker cone to project the highs straight forward in a tight beam rather than a wide arc. The problem—and problem it is when a listener directly in front of a speaker gets too many highs and a listener to the side too few—has largely been solved by various engineering solutions. And as a bonus, an improvement in dispersion encourages room reflections that contribute greatly to a feeling of openness and space in the reproduced sound. However, soft or porous surfaces absorb rather than reflect high frequencies. When the highs are well dispersed, that much more of them may be soaked up before reaching the listener by, say, a deep-pile carpet beneath a floor-mounted speaker, or an upholstered chair and heavy drapes near a speaker in a corner. Speaker placement must clearly strike a balance—even a compromise—between low- and high-frequency performance. Whatever aberrations then remain can often be corrected by judicious use of the speaker's high-frequency level controls and the amplifier's tone controls.
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Prokofiev's
Third Piano Concerto

SERGE PROKOFIEV'S Third Piano Concerto, as we know it, seems a remarkably unified work of art. From a modest, almost reticent, beginning—a brief, quiet introduction marked andante—the music quickly develops the explosive propulsion that characterizes the first movement. The second movement consists of a theme and five variations, some of them fanciful, some grotesque and sardonic. The third movement is a remarkable tug-of-war between the solo piano and the orchestra, with each determined to prevail over the other; finally, in a brilliant coda, it is the piano that leads the way to a breakneck finish. The concerto is an extraordinary tour de force of virtuosity and sheer exuberance, and it conveys the impression of having sprung full-blown, all at once, from its creator's imagination.

All the more remarkable, then, is the fact that the Third Concerto is something of a musical paste-up job. It was during the course of a summer holiday in France in 1921 that Prokofiev put the work together. Three years had elapsed since he had left Russia to wander across Europe and the United States. His reputation as an enfant terrible of modern music was pretty well established, and the creation of a piano concerto at this time was probably prompted by the same impulse that brought Beethoven's piano concertos and so many of Mozart's into being: the need for the composer to have a vehicle for his own performing talents. Prokofiev gathered together from his notebook themes and fragments of themes that he had left unused, some of them dating back as much as ten years: material in the first movement came from sketches of 1911 and 1916; the subject of the second movement's theme and variations dated from 1913; and the last movement contains material originally intended for a string quartet begun in 1918 but then discarded. Prokofiev himself has written: "...When I began working on the concerto in Brittany, I already had all the thematic material I needed except for the third theme of the finale and the subordinate theme of the first movement."

In the late fall of 1921, Prokofiev was in Chicago supervising the rehearsals for the premiere of his opera, _The Love for Three Oranges_, and it was there, on December 16, that the Third Piano Concerto was given its world premiere performance, with Prokofiev as soloist and Frederick Stock conducting the Chicago Symphony Orchestra. Five weeks later Prokofiev introduced the score to New York, as soloist with the Philharmonic-Symphony Society, and he was also the soloist four years later when the concerto entered the repertoire of the Boston Symphony.

The first recording ever made of the concerto is its most authentic: the British recording firm EMI, in June, 1932, recorded the score with Prokofiev as soloist and Piero Coppola conducting the London Symphony Orchestra. This truly legendary performance was reissued some years ago in Angel's Great Recordings of the Century series (COLH 34); the performance is a headlong rush of impetuosity, wit, and keyboard fireworks, and the four-decade-old sound is still amazingly lifelike. Now that the Great Recordings series is defunct, the performance is not, alas, currently available; clearly it should be added immediately to the Seraphim line as others of the COLH series already have been.

GIVEN the documentary evidence of Prokofiev's own way with the score, I rather naturally gravitate toward those recorded performances, among the dozen currently available, that most closely recall Prokofiev's own. Half a dozen do: Martha Argerich and Claudio Abbado (Deutsche Grammophon 13934); Emil Gilels and Kiril Kondrashin (Monitor S 2061); Gary Graffman and George Szell (Columbia MS 6925); Byron Janis and Kondrashin (Mercury SR 90300); William Kapell and Antal Dorati (RCA Victrola VIC 1520); and Julius Katchen and István Kertész (London CS 6633). Kapell's 1949 performance, recently reissued, has the dimmest sonics among these recordings, but it is a treasurable memento of the searing intensity and passionate conviction that characterized the art of this pianist, whose tragic death in a 1953 plane crash at the age of thirty-one robbed us of an artist of major stature.

I must single out for particularly favorable mention the recording by Byron Janis. This was a product of the first recording sessions within the Soviet Union to be undertaken by Western technicians and equipment. At the time (June 1962) the atmosphere both within Russia and between East and West was far happier than has been the case in recent years; Janis' reading has special electric tension and spontaneity, the Moscow Philharmonic Orchestra sounds far better here than on any other recording I know, and the whole is captured in spectacularly vivid sound. Fortunately, it is also available on a splendid reel-to-reel tape (Mercury C 90300).
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Sole à la Sutherland
Chicken Nordica
Boeuf Tartare Alda
Garniture Massenet, Eggplant Opera
Verdi Salad with Mascagni Dressing
Fromage à la Musetta
Délice Callas
Caffè à la Barbaja ou Otello

DIVAS who change their names from Davies to Alda, from Kalogeropoulos to Callas, understand the importance of a name as well as the restaurateurs who name dishes after them. Who wants a “peach-raspberry”? But after Mme. Nellie Melba (née Mitchell) triumphed in Lohengrin and her hotel’s chef served her his newest dessert between the wings of a swan carved out of ice, everybody wanted to try “Pêche Melba.”

The custom of honoring divas with diverse dishes was not new when Escoffier came to the Savoy, and it has not withered since. Opera singers, with their large appetites and their large followings, are still prime choices for chefs’ tributes. Nothing has diminished but the singers’ freedom to enjoy these tributes themselves.

Luisa Tetrazzini could be simultaneously “one of the most prodigious trencherwomen of all human history” and the stage’s most acclaimed consumptive. Furthermore, she and her contemporaries considered this quite logical. Singing the role of Violetta, they
agreed, requires the kind of strength provided by a dish composed of white sauce, Parmesan cheese, mushrooms cooked in butter and sherry, diced chicken, heavy cream, and quantities of spaghetti. Tetrassini unblushingly spent an average of four hours at each meal, and grew stouter with each year. Two decades after Chicken Tetrassini was established on New York menus, Frances Alda could still write "The more pounds the more power," and boast that she had always planned her meals accordingly. For today's opera stars, however, fat-e-m-e spells hunger.

"If music be the food of love," the Duke of Illyria begins—at which the modern Desdemona might well cut him off with "I do perceive here a divided duty." If music is to be the food of love for a modern audience, the singer must go moderato (senza espan-sione) at table. No longer is there much applause for amorous duets in which a head on a shoulder is the closest the tenor and soprano are physically able to get to each other. Only the voices may be rotund. Gone is the time (mid-nineteenth century) when a Marietta Alboni so fat she could not walk alone might sing Juliette's aria at the Paris Opera and draw more applause than any other singer. By the turn of the century, in Mario Ancona's day, contracts were being renewed conditional on weight loss. "That is not fat," growled said baritone when Oscar Hammerstein I prodded the thirty pounds of belly that had to come off, "that is my chest!" Hammerstein, who claimed to "eat little, drink nothing, and smoke only twenty-five cigars a day," was not sympathetic, and managers have if anything grown even more blunt since. Hammerstein's demand was verbal and private, but when the Metropolitan wanted Zinka Milanov to lose twenty-five pounds, they wrote it right into her contract.

Modern chefs are as prone as ever to use butter, both figurative and literal, but when the modern audience protests "Thou com'st in such a questionable shape," modern singers must give heed: dishes named for them these days are more honored in the breach than in the observance. "No spaghetti, no butter, no chianti," sighs Renata Tebaldi: "I keep in shape," modern singers must give heed: dishes traditionally not cared to numb their tongues with hard liquor before fine food. Though a Chicago restaurant named a cocktail for Renata Tebaldi, the lady herself prefers champagne. Caruso's choice was chianti, though on tour he was philosophical and enjoyed, for instance, tequila.

A toast to Henrietta Sonntag was allegedly the first champagne drunk from an honored lady's slipper, and champagne has continued to be the preference of prime donne from Adelina Patti, who slapped her tour manager when he would not give her any (she was eight), through today. And then, comparing Maria Callas with Tebaldi, Callas has said, "is like comparing champagne with cognac. No, champagne with Coca-Cola." The champagne—as well as the prima donna—tradition appears to be unbroken: our aperitif is champagne.

In the center of a panoply of musical instruments on his study wall, Rossini hung a stomach pump, maintaining that it was the best of all instruments. "I know of no more delightful occupation than that of eating," he wrote. In addition to the Castor Oil Waltz, Rossini composed a series for piano with the titles of various hors-d'oeuvres, all except The Radishes appropriately consisting of themes and variations. Rossini's own theme emerges as truffles, of course, and the menu I am about to examine should indeed be considered only for a special occasion—say, a Bel Canto Banquet.

When it comes to an aperitif, opera singers have traditionally not cared to numb their tongues with hard liquor before fine food. Though a Chicago restaurant named a cocktail for Renata Tebaldi, the lady herself prefers champagne. Caruso's choice was chianti, though on tour he was philosophical and enjoyed, for instance, tequila.

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"What is going to interest you much more than my opera," the composer wrote a friend, "is the discovery I have just made of a new salad, for which I hasten to send you the recipe." The ingredients must conclude with "a few truffles, which you have taken care to cut in tiny pieces. The truffles give to this seasoning a kind of nimbus to plunge the gourmand into an ecstasy." Said Toklas coldly, "Dumas' salad was better.

Timbales à la Rossini

Dumas, however, has no entries in Larousse Gastronome. While Rossini has twelve—each absolutely requiring truffles. To make Timbales à la Rossini, decorate buttered molds with truffles. Line them with fine veal forcemeat and fill with a salpicon of foie gras and truffles blended with a rich demi-glace sauce. Serve with a demi-glace sauce flavored with truffle essence.
Consommé Bizet

Soups are a boon to singers because they are generally easy on the throat and figure. Robert Merrill, after doing an ad for Campbell's Soup, stacked the thousand cans they sent him in designs in his small apartment and supped on one flavor nightly until he had room to walk again. Merrill, who confesses that assigning him to the role of Falstaff would be typecasting, was rehearsing Carmen at the time, and no doubt the production benefited visually from his perseverance. Plump Bizet, who used to empty a bonbon dish in two minutes, would have appreciated Merrill's self-denial. To make Consommé Bizet, thicken chicken consomme with tapioca and garnish with chicken quenelles mixed with chopped tarragon. Sprinkle with chervil leaves.

Macaroni à la Rossini

To paraphrase Dizzy Dean on the relative merits of ball players, as much as opera singers like soup, that's how much more they like pasta. The association is traditional but not always tranquil. When a Roman firm claimed that a diet of its "psychological macaroni" was responsible for Callas' plunge from 202 to 117 pounds, the lady sued. Caruso, who routinely ate three kinds of spaghetti at lunch alone (in addition to antipasto, soup, meat, vegetables, salad, fruit, wine, and coffee), caused an uproar when he spent his entire operatic debut fee, costume money and all, on four suppers. The management came up with enough of a raise just before dress rehearsal to prevent a scandal of nudity, but Caruso's appetite was soon famous.

Singing is hard work, of course, and any soprano may expect to be famished by mid-Aida. A singer can lose five pounds in three acts—more, if he/she dies in the third. (Death scenes, thanks to their traditional length, require enormous strength.) Naturally there is some eating between arias, and even more rumors of it. La Sonnambula's first Amina was, like Caruso, popularly supposed to fortify herself with spaghetti backstage. "One swallow does not make a slumberer," she is sworn to have observed, between gulps, just before setting out on her longest walk—to which it might be added that it takes a lot of pasta to make a Giuditta.

Many composers have shared their singers' addiction to pasta. Wagner once stood up an orchestral performance which had been arranged just for him, at his own request, because he smelled spaghetti on his way to the concert hall. When he had eaten (the musicians riffling their scores the while) he confessed that, after such a meal, listening to classical music would be "inopportune"; in other words, he had to go back to the hotel and sleep it off. The musicians were dismissed, the future composer of Andrea Chénier among them, and shouts of "Abbasso Wagner! Evviva Rossini!" filled their conservatory. The student-musicians, it appears, had a lot to learn about Rossini. "I wrote the overture to Otello," Rossini relates, "in a small room in [Domenico] Barbaja's palace in Naples, where that fiercest and baldest of impresarios locked me in by force with a plate of boiled macaroni swimming in water with no seasoning, threatening that I should not leave the room alive until I had finished the last note of the overture." This probably was the most effective way of dealing with a composer who declared that "The stomach is the conductor who leads the great orchestra of our passions; an empty stomach represents to my mind the bassoon or piccolo, grunting out discontent, or squeaking forth envy; a full stomach, on the contrary, is the triangle of pleasure and the kettle-drum of joy."

Rossini, his wife (Isabella Colbran), and his "fiercest of impressarios" (Barbaja) made an interesting triangle of pleasure themselves, for the soprano had been Barbaja's mistress before she became Rossini's. To Barbaja's macaroni, however, Rossini preferred his own, as follows: Cook two cups of macaroni in salted water; drain and put into a stew pan with a little gravy. Simmer until the gravy is absorbed. Put a layer of the macaroni in a baking dish, sprinkle with grated Parmesan cheese and sliced truffles mixed with a little sauce espagnole. Fill the dish with these, alternating layers, and on the top layer put truffles. Place in a hot oven for a few minutes.

Sole a la Sutherland

According to the head chef of Longchamps Restaurants in New York, Sole a la Sutherland is something less than a snap. Marinate twelve filets of English sole thirty minutes in a tablespoon of lemon juice
and half a glass of cognac. Add three chopped shallots, six mushroom caps cut julienne style, 1 ounce fish stock, and 2 ounces of dry white wine; bring to a boil, cover, and cook 10 minutes. Remove the filets, place them on a bed of wild rice, and keep them warm. Reduce the liquid by two thirds, bind with a mixture of 1 tablespoon butter and one of flour. Salt to taste. Add ½ cup of heavy cream and boil 3 minutes. Remove from the heat and add an ounce of butter, 2 tablespoons Hollandaise sauce, and a tablespoon of whipped cream. Arrange the julienned mushrooms on top of the sole and pour the sauce thereover. Bake at 375° until browned.

**Chicken Nordica**

It has been said that “chicken is a canvas on which the greatest chefs may paint their masterpieces.” Escoffier created three chicken recipes for Adelina Patti alone (who nonetheless, his biographers say, felt slighted: she took to wearing far more jewels at his hotel after that raspberried peach moved in). New York’s Quo Vadis Restaurant serves both Capon Tetrazzini and Crêpes Corelli. The host-owners invented the latter, French pancakes stuffed with curried chicken and covered with sauce béchamel, to signalize Franco Corelli’s success in Turandot. Chicken Nordica was named for Lillian Norton at a time when her earnings were so great that her faithless husband fainted at the news she was divorcing him.

A traditional recipe for Chicken Nordica takes pages to relate, all day to prepare, and weeks to atone for. To make the easiest and most austere Chicken Nordica still worthy of the name, sauté for 5 minutes ½ lb. chicken livers, ¼ lb. ground veal, 3 tablespoons chopped onion, ½ cup chopped parsley, salt and pepper, in 3 tablespoons butter. Bind together with 4 beaten egg yolks and ¼ cup soft bread crumbs. Stuff a 4 lb. roasting chicken with this mixture. Place a thin slice of prosciutto ham over each side of the chicken’s breast. Roast 35 minutes per pound at 300°, basting occasionally with 2 tablespoons butter melted in ½ cup of Madeira.

Nearly all singers begin a performance hungry and finish it ravenous. The phrase in bocca di lupo, muttered before the first cue so as to ward off the evil eye during the performance, takes on new meaning after the footlights fade, for into the mouths of operatic wolves go the most astonishing portions.

“I’d rather keep my voice than my figure,” Frances Alda replied sweetly to Rosa Ponselle’s boast of having reduced, and her schedule bore her out. Between hearty breakfast and robust lunch, she never missed a mid-morning snack (admittedly the pause that refleshes), especially if, as in Alda’s case, it consists of a dozen oysters and a whole bottle of stout. She was not atypical. The ideal operatic soprano has been defined as the offspring of a canary and a steam boiler, and Alda would have been the first to point out that the *prima donna* eats like an athlete in training because she is one. Joan Sutherland, for instance, lost 50 pounds merely rehearsing for her 1963 season. Fortunately that left her with 170. The advantage of starting out with a certain heftiness can be seen.

There is, indeed, more than one advantage. Think of Caterina Gabrielli, better known in her youth as La Cuochetina (because, recorded her nineteenth-century biographer, “she was, sad to relate, the daughter of a cook”). Nothing was humble about Gabrielli but her birth, and certainly not her appetite. None of them, in fact; but the license of one saved her from the consequences of another. On the occasion when a French lover hid himself in her house to be sure of her fidelity, and assured himself of precisely the opposite, the “light” soprano owed her life to her *embonpoint*, for his sword point was stopped by her whalebone stays.

Robert Merrill once took first prize in a Belgian Endive Association recipe contest by suggesting that endive leaves be stuffed with beef tartare, but these instructions come straight from the memoirs! of Frances Alda!!!

**Boeuf Tartare Alda**

“The dish which the Tartars partook of and which gave them strength to ravage Asia and Eastern Europe. To make it, you chop a raw onion very fine! On a nest of this you mound half a pound of raw chopped beef!! In a little hollow of the beef you drop a raw egg!!! The whole is garnished with capers, and is eaten with three or four generous tablespoonfuls of olive oil poured over all!!!! After that, if you can’t make your voice heard to the topmost seat in the gallery and out into the square before the Opera House, you’d better stick to the radio.

**Garniture Massenet, Eggplant Opera**

The *Boeuf Tartare* is dressed up with Anna pota-

## STEREO REVIEW
between towels, dredge in peppered flour, cook in butter and oil, and arrange in a buttered gratin dish. Peel and cut up 4 tomatoes; discard the seeds. Cook 3 minutes in 2 tablespoons of butter, one of oil. Remove from heat, stir in a tablespoon of grated cheese, sprinkle with 1/2 teaspoon salt, a dash of paprika, and pepper, and spread over the eggplant. Sprinkle with grated cheese and buttered crumbs and bake till amber.

**Verdi Salad with Mascagni Dressing**

Greens, of course, with oil and lemon juice. "What is vinegar but wine gone sour?" demanded Mascagni, and compared it to music critics: "Music critics are musicians who have gone sour, too. I cannot stand the former at the table, nor the latter at the concert hall."

**Fromage à la Musetta**

This tart is easy to make. Line a 9-inch pan with pastry. Combine 4 beaten eggs with 1 1/2 cups cream, 1/2 lb. grated cheese, 1/2 teaspoon salt, and a dash of red pepper. Bake it in the pie shell for 15 minutes at 400° and another 30 minutes at 325°.

**Délice Callas**

Escoffier in time added Pears Melba, Strawberries Melba, and Coupe Melba to his peach sensation, and did almost as well with Coupe Adelina Patti, Coupe Emma Calvé, and (inexplicably not a salad) Poires Mary Garden: vanilla ice cream, syrup-cooked pears, cherry compote, and raspberry sauce. "My success," said the world's most famous chef, "comes from the fact that my best dishes were created for ladies."

Ladies Melba and Garden were served Peach Melba and Pears Mary Garden by Edward VII after singing at Windsor Castle, but all that cream and sugar neither smoothed nor sweetened the affair. "What a dreadful concert that would have been if I had not sung," Dame Nellie observed, in the voice that could fill Covent Garden. When Calvé was invited—by Oscar Hammerstein I—to share Pêches Melba with their namesake, she prudently declined.

Some divas are not much different today, but chefs are stillundaunted by their temperament and honor sopranos with such productions as the Colony Restaurant's Beignets Soufflés with Sauce Callas. (This sauce is basically Sabayon, to which has been added a little white port. In a pinch, red may be substituted.) Miss Callas, who now largely eschews the fried eggs topped with cheese and fried potatoes said to have been her favorite girlhood refreshment, is reported to relish Beignets, and in fact any dessert except one involving Bing cherries. Whether she has ever enjoyed the Délicie Callas originated for her 1959 Kansas City reception, however, is a question. A "courteously" Callas "attended a post-concert party at the River Club where she danced with local millionaires and nibbled... 'Delice Callas';" said *Time*. "Callas lived up to her reputation for capriciousness last night by standing up the Governor of Missouri," said (of the same fête) the New York *Journal American*, "...just too tired to attend a champagne reception in her honor."

To make a Délicie Callas, put peppermint ice cream in a meringue nest, cover it with brandied bitter-chocolate sauce and chopped pistachio nuts, decorate with whipped cream, and garnish with crystallized rose petals, violets, and mint leaves. Maybe it would be easier to join Kansas City's River Club, where, though Délicie Callas has never been listed on the menu, it is available to members on request.

**Caffè à la Barbaja ou Otello**

Those who have omitted two or more of the foregoing courses might like to conclude with Caffè à la Barbaja. The wet macaroni which produced Otello's overture was not the product of culinary ineptitude, but of a caustic wit. As to music, it is recorded that Barbaja once interrupted the "Do, re, mi" of an auditioner to say that it would be useless for her to sing in that language, and he could not engage her. It is also said that he once ordered a piano's legs shortened to appease a singer who had complained that the instrument was too high, a gaffe which has been variously attributed these past hundred years, but it must be true of someone. As to the kitchen, however, Barbaja was the inventor of Schlagobers, the flourish of whipped cream served on coffee to this day in Vienna, where Barbaja was a waiter, until the profits of his sweet invention freed him to gamble and speculate, and at last to manage opera houses, which is much the same thing. However, for those who have proceeded allegro giusto through every entry thus far, we earnestly recommended Caffè Otello. After this cream-drenched menu, black will be beautiful.

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**Martha Bennett Stiles** is a novelist and a prolific author of nonfiction for periodicals. *Her latest work, Dougal Looks for Birds, a children's book, will be published by Four Winds Press.*
ON STAGE at the Hollywood Bowl, Zubin Mehta stands in rehearsal clothes: trendy, tailored tan cords, a brown turtleneck, and hardware Guccis. More than three years after he said flatly that his Los Angeles Philharmonic was better than the New York Philharmonic and thus wiped himself out of the running to head the older orchestra, Mehta leads his 101-piece L.A. group through a final rehearsal of Beethoven's Ninth in the mid-Saturday sun with some of the conductorial flamboyance of the "Zubie-baby" years, 1966-1967, and with far less arrogance and much more confidence. He is also distinctly thicker through the middle, and the jet-black hair of his matinee-idol period is thinner and duller. Yet some things haven't changed. Tonight he will conduct the familiar Beethoven symphony for seven thousand paying customers at the Bowl, tomorrow morning leave for Israel to conduct the Israel Philharmonic, return to London in two weeks for recording, and then tour the eastern United States with the L.A. orchestra, winding up performing a new Penderecki work (Cosmogony) at the United Nations. All along the way he will avoid most journalists ("If I say 'the,' they manage to misquote me") and any chat about the New York Philharmonic, his playboy image, or his presumed sexual prowess.

In Mehta's dressing room backstage at the Bowl, the first impression of less arrogance but more confidence is confirmed. The arrogance is tempered by a new humility that seems at least half-felt ("The Beethoven Ninth I play tonight has to be better than one I did three years ago; I'm growing and learning as a conductor and my orchestra is growing and learning with me"). And the confidence is partly musical and partly because the New York incident assured his tenure in Los Angeles for as long as he wants it. "That was the last time Mrs. Chandler ever interfered," Mehta says. "She has left me alone ever since, and even compliments me on the modern works." Since Mrs. Dorothy Buffum Chandler is not only vice-chairman of the Board of Regents of the University of California but also the reigning power at the Los Angeles Times, the Los Angeles Music Center, and the Hollywood Bowl, her support means more than merely having a local booster in your corner. (At the Music Center the large pavilion in
which the L.A. Philharmonic plays is named for her.)
As for the moderns, Mrs. Chandler didn't use to like them, and Mehta himself, a romantic by inclination, is by his own admission weakest with them.

Mehta's and the orchestra's London-label recording contract calls for four records a year, one of the four a modern work, and Mehta, who does additional records on London with the Israelis and guest conducts on RCA and other labels, dislikes the quotas. "It's against my principles to record that much and to record a work I am not completely ready with because I haven't done it enough times 'live.'"

Among his recent record releases, Mehta is happiest with an old chestnut, Tchaikovsky's 1812 Overture, complete with sixteen shots from a real cannon recorded in a tunnel on the San Bernardino Freeway at 5 a.m. It sold 13,000 copies the first day of its release, 1,500 in Los Angeles alone. "For a pop record that's a bad day, but we have a hit on our hands."

At only thirty-five, Mehta is still very much in the boy-wonder-on-the-way-up category, and he's learned to hold his tongue despite some strongly held and virulently expressed opinions. Now his juiciest utterances in interviews are often followed by "Don't use that." He disclaims any interest in the Bel-Air Circuit, what's left of Hollywood society, but he is considered a big catch at any dinner party. His recent second marriage to the stunning but slightly more refined kind of groupie.

Asked if he was taking advantage of his undeniable charisma and sex appeal to draw non-musically inclined audiences to his concerts, Mehta said that apart from the obvious groupies and little old ladies from Pasadena (whom he claims he doesn't encourage) he most certainly was not. "Any artist who gets on stage to do anything—whether he's good-looking or not—has a certain 'charisma' and uses it to some degree. You might get someone in to see you once because they've heard something about you or seen your picture, but you can't make them like or understand music just by your being there. Something else has to happen or they won't come back. Los Angeles audiences are genuinely becoming more sophisticated about their orchestra and more appreciative of the music we play."

It is true that the size and enthusiasm of the audience for the Los Angeles Philharmonic have increased. And this increase is certainly due in some part to Mehta's flamboyant reputation, but he chooses to say it is not to any significant degree. "I'm so tired of this 'Zubie' business—nobody calls me that; Newsweek magazine invented it. I enjoy myself as any young man would, and I enjoy myself with women—the new generation of conductors are all normal in that respect," he says with a swipe at a slightly older generation.

Politically outspoken, he eschews categories. "When I was a boy in India, Nehru was always in jail. Why should I look down on Cleaver because he is? Kenyatta was jailed, now he is head of his country. We always find out ten years later. Lumumba was never a Communist." In spite of his work with the Israel Philharmonic, Mehta says, "I'm not one hundred per cent Israel-biased; I don't love every cactus in the land. But I do think U Thant is scared to death of the Arabs." He's anti-Reagan and the State of California for not giving a cent to his orchestra. "This is a rich state, not a broke state, and who do you think the orchestra does honor to? Even San Francisco couldn't argue with that." The Los Angeles Philharmonic needs one million dollars a year to run on, plus four million for matching a Ford Foundation grant, and Mehta is not one to stay aloof from that worry. "The Ford Foundation is the savior of all culture in America," he says.

Mehta counts among his weaknesses yet to conquer a lack of experience in the works of Bach ("I still think I have a long way to go"). He will not venture soon again into the pop world, after a disastrous in-concert collaboration with Frank Zappa and the Mothers of Invention. The piece he did with them which so displeased him in performance (but not in musical quality) was 200 Motels (Zappa and the Mothers are now making a movie based on it and using the same title). "Trying to shock the public with rubber animals and by saying obscene things has nothing to do with the music—either you like it or you don't. Some of it I like, but let it speak for itself." Mehta thinks the one time he reached a young audience was when he did an impromptu concert with his orchestra and members of the Roger Wagner Chorale at U.C.L.A. after the tragedy at Kent State. It ended with the Hallelujah Chorus, and the hands of participants and audience were upraised in "V" peace signs.

He reckons that he spends five months a year in Los Angeles, three in Israel, one at the Metropolitan Opera in New York, and two traveling, with one left for his vacation. But L.A. is more and more home base. "The orchestra is constantly gaining greater acceptance here, and Los Angeles is becoming increasingly music-minded." Outlying towns where he tours with the orchestra are another matter, says Mehta. "I have to have receivers in the audience—people who know what I'm trying to do and whether I do it. Here I have receivers; in some places I don't." As for moving on, "I would much rather stay here in Los Angeles for the moment. I want to be with a growing organization rather than an arrived, establishment one. I consider myself a growing organization rather than an arrived, establishment one."
MUCH IN DEMAND:

Kris Kristofferson

Odysseus in Levis

Also known as:
Helicopter Pilot, Singer, Actor, Rhodes Scholar, Army Officer, and Songwriter of the Year

Description by: J Marks
Photographed by: Baron Wolman
THE SCENE: Slow fade-in. Los Angeles. A boy and a girl come into focus. They hunch against a cigarette machine near the entrance of the Troubadour, a successfully seedy hang-out on Santa Monica Boulevard. The boy is attractively derelict-looking in a hustler's rumpled midnight-cowboy gear. The girl is perfectly tubular, except for evidence of a seven-month pregnancy. Her art-nouveau body looks drenched in a torrent of stringy white fur trying to be a cape, and under it she wears a Moroccan sheath fastened with a row of seventy tiny buttons running from her breast, across the ominous abundance of her belly, down to her fragile ankles and large feet. A cloud of freaked-out hair surrounds her emaciated face, from which two almond-shaped eyes are sending hysterically casual messages. Her narrow mouth is fixed in an expression of pure indifference as she slowly clamps her long, thin fingers around the hustler's belt buckle and pulls him into the steaming crush of the bar. The boy, totally stoned, follows like a dreamer . . . until the director yells “CUT!”

COULD this be Kris Kristofferson? Yes . . . but he's not a hustler, nor is he a movie star. Not yet, anyway. He's a troubadour, a songwriter-singer whose abrupt rise to fame has resulted in his starring in a Hollywood movie called Dealer with co-stars Viva (no last name) and Karen (Five Easy Pieces) Black. It is Viva with whom he's just completed the sixteenth attempt to capture an entrance on film.

“Jeez,” Kris tells me later in his Texas drawl while he and Viva sit over dinner at the Aware Inn on Sunset Boulevard, “we spend all day filming something puny like that and then we have to get right to it and finish off a really good scene where we get to do some talking in less than half an hour. Lord, it's worse than the pressure of a recording session!”

When he gets up from the table to make a phone call I ask Viva, “What do you think of Kris?”

“Fab-U-lous,” she intones is that very flat voice I already seem yellowed and wrinkled by adventure.

She flashes a mannequin-like grimace and arches her long neck. “Fab-U-lous,” she says again.

Kristofferson ambles back to the table from the phone, lights up a Bull Durham cigarette from his fourth pack of the day, and slouches in the chair.

“That guy is a real whim,” he complains of the businessman he's just been talking to on the phone.

“He's the type of cat who keeps telling you how much more he knows about music than you do and all about his thirty-five years of experience behind you. What you got is one year of experience thirty-five times!”

Kristofferson can get away with talking that way to executives—now. He's the hottest thing going in Nashville. At the annual Country Music Association awards show he walked off with the “Song of the Year” award for his Sunday Mornin' Comin' Down, and he has just been named Songwriter of the Year by the Nashville Songwriters' Association. That leaves the conservative folks up and down Nashville's famous Music Row in something of a stew. There are lots down there who aren't at all happy about his success.

To them Kristofferson is some kind of weirdo. Here he comes, this long-haired outsider with a college education, in his suede bell-bottoms, stumbling around probably from drugs or something, climbing right up there onto the stage of the venerable Grand Ole Opry to accept the highest award in the field of country music, and he doesn't even have the decency to wear a proper suit and tie! LAND O' GOSHEN!

“Anyway, my music isn't exactly country,” Kris is saying as we drive toward the hotel where he can clean up after a long day in front of the cameras. “I think it started down in Brownsville, Texas. Of course, I've been influenced by a lot of things since I was a kid, but what got deepest down into my gut was that border Mexican music—basically simple melodies where the emotion in the song is up front . . . and Mexican harmonies . . . simple two-part things . . . with feeling.”

“By the time I was in high school—this was Fifty of Fifty-four—I was out in California. Of course I knew who all the country singers were, but Hank Williams was my big hero then, and he was pretty unknown out here, except for country fans. And there weren't many country fans in those days. But what I dug about the country music (and still do about the good stuff) is that they're honest lyrics and that there is more of an honest expression of emotion—like in the voice of Hank Williams, or today George Jones and Merle Haggard and those guys—than you find in the pop guys. Whenever you heard somebody else trying to record a Hank Williams song he really sucked. I think the first guy that ever sang him successfully was Ray Charles. You know, 'cause he's so sad and they're so soul.”

Just under six feet tall, and thirty-four years old, Kris hunches down over his memories and his twelve-string guitar, squeezing his soft blue eyes closed, as his voice—battered by booze and Bull Durham into a raspy baritone—talks and sings lyrics that already seem yellowed and wrinkled by adventures and time.

“Casey's Last Ride started out as nothing more
than a line and an idea, an image of subways in Lon-
don. 'Casey joins the hollow sounds/of silent people
walking down/the stairway to the subways/and the
shadows down below.' You know, something like
that. And then it just laid in my head. I didn't finish
the thing or nothin'. But I was always thinking about
those lines until one night when I'm driving from
New Orleans to Morgan City where I was gonna go
out in the Gulf on one of those offshore oil rigs. And
tired? Like three A.M. in a bad rainstorm and I had
three flat tires. It's not the time to be writing songs.
And that damned song came to me. All of it—even
with that middle section that I really like: 'Oh, she
said, Casey, it's been so long since I've seen you./
Here, she said, just a kiss to make a body smile./See,
she said, I've put on new stockings just to please
you./Lord, she said, Casey, can you only stay a
while?' It came out of nowhere. When you're writin'
you're just holdin' up the pen.''

Kristofferson admits that his songs are autobio-
ographical, a natural enough thing for a troubadour.
"The tune I wrote that first hit people hard was Jody
and the Kid. I wrote it back when I was splitting up
with my old lady, and I was taking my little girl
around to the places I worked at—like this Tally Ho
Tavern where I used to tend bar. It's a kind of a
pub-like old place over on Sixteenth Avenue South
in Nashville and it's really old—sort of like the barn
in my song Beat the Devil. Some old guy, one of the
regulars, saw the little girl and me comin' in. And he
said, 'Hey, looka yonder. There comes critter and
the kid.' Well, I didn't think 'Flash! There's a song!'
But it kinda stuck in my head, I guess, 'cause it was a
real sad time for me. I hated losing the kids, especial-
ly the little girl, 'cause she's my faithful fan. Later,
when I went down to work on the Gulf, I finished
the song.''

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o

THOUGH Kristofferson admits that Hank Williams
was his hero back when he was eight, he has more in
common with the great folk troubadours of the past,
such as Woody Guthrie, or contemporary songwri-
ter-singers like Tom Rapp and Tom Rush. He's
more poet than musician, more concerned with the
power than the beauty of expression. This intent is
evident in his voice as well as his songs. He sings in a
rough, personal, and imperfect voice. As a performer
he is paradoxically commonplace at the same time he
is mystical. He appeals strongly to rock fans who
have been guided into a new kind of "country" mu-
sic by people like Dylan, and to sophisticates who
discover in his lyrics the perfect economy and bal-
ance of a short story.

"To me," Kris drawls quietly in the hotel room as
he strips off his black turtleneck, "the purpose of any
kind of writing or any kind of art form is to move
people—to laughter or to crying or to anger or to
something. But you’ve gotta move them...emotionally and not intellectually." At thirty-plus, Kris is
starting to show signs of a narrow spare tire—a tro-
phy, no doubt, from countless nights on the town
with drinking buddies. His handsome face is also be-
ginning to show the unmistakable puffiness of a
drinker. "Maybe I’m into booze," he confesses, "be-
cause I’m older than most of the kids in the music
business." But he is still as wiry and smooth and hair-
less as an athletic youngster. "Grass is just fine, but
booze and me are old friends." He smiles as he or-
ders two vodkas and ginger-ale from room service,
then disappears into the bathroom, from which he
shouts over the sound of the shower. "Don’t get me
wrong. I’m not a political man, but I’m also not a
bigot. When I wrote *Blame It on the Stones*, I was
mad 'cause Jagger was given those inordinate sen-
tences just for having something like two pep pills
and one joint in his pocket. Kids protested in Lon-
don and even the conservatives got hot over the
whole affair. As for me, well, I identified with the
Rolling Stones because the people in my own family
were always putting down musicians. Yet people that
I saw in every walk of life—you know, doctors, law-
yers, students, members of bridge clubs—they were
on some kind of escape trip too. Whether it was
booze, uppers, downers, or grass. And so why nail
the Stones? That’s all it was about—nothing politi-
cal."

Kris is the son of an ex-military man (later an air-
operations manager for Aramco) who died last
Christmas as this was being written. From Brownsville, Texas, where he was born, he moved with his
family to California where he later attended Pomona
College. "I wasn’t a rebel when I was eight, but I
was a rebel when I was in California. Maybe that’s
just because I was a different age. But I think I went
back more to what I really dug. When I was in Cali-
ifornia, I was embarrassed to say I liked country mu-
sic, and I’d roll the windows up in my car and listen
to Hank Williams.

"But I was a creative writing major in my under-
graduate years, and I was getting some good stuff
written." As a matter of fact, he won four out of
twenty prizes in *The Atlantic’s* collegiate short-story
contest and was subsequently awarded a Rhodes
Scholarship to Oxford University.

"When I got to England," he says as he climbs into
a beautiful black suede and leather outfit (he had it
made in Peru while working on the Dennis Hopper
film called *The Last Movie*), "I really got involved
in literature. I was excited about Blake and Shake-
spere and Donne. My old man, he was in the Army,
so he thought I was doing just fine, but I really
wasn’t sure why I was at Oxford. I can remember
consciously compromising myself and saying that I
was going to play according to the rules and if some
idiot was up in front of the class saying something
stupid and he was on some kind of an ego trip, I was
not going to cut him down or anything. I was going
to agree with him and I was gonna study, and I was
going to give him back what he wanted, regardless
of whether it was right or not.

"And I did it. But I really didn’t like school work.
And, man, I never wanted to be a schoolteacher.
They kept correcting my accent and my grammar and kept tellin' me I sounded like a hick and I kept right on talking my own way. But that's not much resistance. Today kids stand up for their ideals, but back then most of us were just so damned glad to be in college that we kept our mouths shut. What I was doing at Oxford was what somebody else wanted me to do. And it took a complete tearing loose to get free of it and of my family. I had to drop straight to the bottom.

"Let's see... yeah, that's right: when I left Oxford, I got married and went into the Army. I was an officer when I went in and went through jump school and on to flight school. When I got out I was a captain. And I was on the way to teachin' English Lit. up at West Point, which was, as far as the family was concerned, a nice place to be. And I knew I didn't want to, and I was foolin' myself into thinkin' I might dig it 'cause I went up there and visited the place, and it was graduation time and it was beautiful up there and there were all those pretty girls out seein' their beaux, and I went around with a major who showed me the stuff and he started talkin' about lesson plans and gave me these books that I had to read ahead of time, and this vague feelin' of despair began creepin' over my body, and I remember I rode back on the bus... I still didn't know that I wasn't gonna do it... didn't know till I got to Nashville and all of a sudden I saw people—man, they were crazy!—they were alive and they were creatin' things that... writing songs. They were all up where I hadn't been for years, 'cause I mean you're really dead in the Army.

"Well, it was the roughest thing I'd ever done in my life. I just turned my back on the whole thing: education, family, past, and position. For a year and a half I worked at Columbia Recording Studios in Nashville, cleaning ashtrays and doing things like that. I got offers to work for music publishing companies, but I knew I would never do the writing I wanted to do if I got involved in a job with responsibili-
tival, which was the first time I had ever performed publicly. I was scared to death and I think maybe Johnny was too. But I got pretty good reviews and that got him interested in recording some of my stuff. It was so incredible: Johnny Cash singing Sunday Mornin’ Comin’ Down. He was the one guy in the world I really wanted to meet in Nashville. He and his wife June Carter got to be like my mom and dad. They took me in when I was still emptying ashtrays, and Johnny put me on his TV show and he wrote the notes on the back of my first album.

Kris and I walked out into the warm Los Angeles night. We got into the car and drove through Laurel Canyon to the San Fernando Valley where Kris had promised to meet an old girl friend who, like most of his girls, felt thoroughly neglected. Sailing over the dark hills and peering down at the sea of lights stretching limitlessly across the valley floor, I asked Kris about his new career in the movies.

‘My first movie,’’ he grinned, ‘was The Last Movie.’ That’s where he met the beauty we were on route to visit. The film was the project of Dennis Hopper, whose phenomenal success with Easy Rider won him a huge budget and total artistic freedom to make another film. He assembled his cast in a village outside Lima, Peru, and went to work with the semblance of an idea but without a script.

‘I’d really lucked into that, because a friend of mine, Jim Baker, a Texan who knows Dennis through his art work, has kept in touch ever since I met him back when I was at Oxford. And he was the art critic for the Forth Worth-Dallas area. A groovy cat, and at various times in between my separations from my old lady and Nashville and everything I’d stop by and visit all those people. Anyway, they were all really friendly and really interested in what I was doing, and tried to keep me up, and push me, and he happened to be talking to Dennis about me or something and Dennis told him he really dug Me and Bobby McGee. So he calls me up and says, ‘Dennis is out here gettin’ ready to make another movie. Will you come out and lay some songs on him?’

‘So I just packed my bags and flew to California out here, and went to some place in Malibu, and sang or made some tapes, I can’t remember which. Anyway, we were all a little wasted at the end of the night. You know, we got along real good, he seemed so much like Ramblin’ Jack Elliott that I kept callin’ him Jack. Finally, I passed out on the floor. He called up the next day and asked if I wanted to go to Peru and make a movie. And I said ‘Of course.’’

We had rolled up to the posh and very conservative Tail of the Cock on Ventura Boulevard where the attendant gave both Kris and me an incredulous look and reluctantly drove off to park our car. We
headed into the bar. "How about the new film?" I asked him as we peered around looking for Kris' girl.

"Well," he laughs, "I lucked into that one too. The guy who cast Five Easy Pieces had seen me at the Troubadour and liked me. Last summer, when Kris made his first appearance in Los Angeles at the Troubadour with Linda Ronstadt, he sent the critics back to their typewriters searching for superlatives. That success brought him all kinds of touring offers and stacks of movie scripts. I got to know him out at Jack Nicholson's house. You see, I had come to L.A. 'cause Janis Joplin died, and I was pretty broken up about it. I didn't want to go to her funeral or anything, I just wanted to know if anybody knew what had actually happened.

"Well, anyway, I was in Los Angeles so they asked me to read for the part. Next day they made a screen test of me and then I split for Nashville. About a day or so later they called and said I got the part, so I came back out to California. A young director named Bill Norton wrote the script. Karen Black plays my old lady and Viva plays this wealthy chick who picks me up. I play a cat who used to be a musician but who got into dealing to make a living.'

It could be another Kristofferson story/song:

He's a poet, he's a picker, he's a prophet, he's a pusher,
He's a pilgrim and a preacher and a problem when he's stoned,
He's a walking contradiction, partly truth and partly fiction
Taking every wrong direction on his lonely way back home.

After searching the entire bar we find Kris' date waiting impatiently for us at a table in the restaurant. She's gorgeous. And I feel just a little bit dumbfounded by the array of spectacular women who have made contact with Kristofferson during the four days of our conversations. "I'm just a lucky guy with chicks. It gets really lonely being on the road all the time. All performers need company."

Kris used to give some of his company to Janis Joplin, whom he remembers with deep affection. One night he was walking her home from a crummy little bar across the tracks from the shabby Tropicana Motel on Santa Monica Boulevard where many rock stars stay. "She was miserable. I tried to cheer her up, but it wasn't much use. Janis was sort of meant for the blues. 'I'm writin' a tune,' she told me that night. 'It's called Just Made Love to 25,000 People and I'm Goin' Home Alone.' That was the last time I ever saw ol' Janis," Kris murmured.

For Kristofferson, women are an inspiration—and vice versa, apparently. The list of his lady admirers includes many of the famous and a few of the notorious. The newspapers provide a constant flow of questionable gossip about his relationships, some awkwardly funny, some downright embarrassing, some scandalous. "He's a poetic truck driver," one illustrous lady of song once confided to me. "He has had most of us and he's had most of us more than once. There's the great lady of song who made him park his car a block down the street when he stayed over, and there's the diva who was mad for both Kris and her jailed husband. Mature, sophisticated women who scoff at rock stars look at Kris as if he were the ultimate man. His sincerity is his best weapon."

By now it's late. We have walked the young lady to her car and Kris says good night. We drive back to the hotel. "Do you ever feel that you're standing between two worlds?" I ask the guy who can talk about Blake and Donne and Michelangelo on the one hand and Jimmy Rodgers and Hank Williams on the other.

As he drops me at the curb, he replies a bit sadly. "I've felt that way all my damned life. I really have the feeling that I'm an outsider. Everyplace I go, I've never been a part of any group or any party or hung around with any one cat or anything like that. The women I know today won't be the ones I'll know tomorrow. I'm friends with a lot of people but not anybody's only friend. I got to keep moving and living if I'm going to keep on writing. I'm a scared writer. I never know if I'm gonna write another song."

FINAL SCENE: Medium long shot. Music in the background.

Around the honky tonsks,
Searching for a sign.

There he goes, off into the sunset, a little older, a little more roll around the middle, his dog running behind, his guitar under one arm and a girl hanging off the other. There's a bottle of booze in his back pocket.

Kris Kristofferson:
Gettin' by on gettin' high
On women, words and wine.

Slow fade-out.

J Marks, writer and recording artist, performs with the First National Nothing. Author of Rock and Other Four Letter Words, he has been described as the rock generation's main historian.
If Kris Kristofferson had been incorruptible, he might not have been noticed in the crowd of new-style troubadours. Most of his contemporary singer-songwriters are young, innocent, and astoundingly idealistic, and are, when you come down to it, variations on the style of Tim Hardin—though usually without Tim's humility. Kristofferson is different. He has been corrupted. Hard times have fractured his idealism as whiskey and tobacco have aged his voice. His songs deal with how it is to feel inadequate. The world is a mess, all right, he concludes, but then so am I. The hero winds up in jail only partway because of his life style and politics—but he probably the most startling song heard in 1970. It left me almost gasping when I first heard the Johnny Cash version. Kristofferson's version on this record seems a little overcooked, sounding as if he was afraid to really let us have it. Nevertheless, it is his ultimate statement to date about loneliness, and Kris has made a lot of statements about loneliness. The lament for lost or never-had companions or loves dogs his songs with the quiet efficiency of a small-town bookkeeper. Many songs also mention being broke and hung over.

We often read in liner notes how this or that songwriter uses melodies merely as vehicles for putting his words across—and we usually find little evidence of any real care in matching words and melody. It can truly be said of Kristofferson, however. Either he uses great care in putting the two elements together or has a sure instinct for what kind of melody is needed, for he invariably finds a tune that fits his lyrics in tone and mood. Most of his melodies are simple and follow folk and country lines. Sunday Mornin' sounds more like something from the cello school of rock composers, and so it stands out among Kristofferson songs just as it stands out generally. Still, it curves around better serve the words, and delivers them with maximum impact, and that was his reason for inventing it. In Blame It on the Stones, Kristofferson fashioned a bridge from the tune of the old hymn Bringing in the Sheaves. A way twist, that, using the hippie-hating redneck's theme music against him. Religion, as it is sometimes misused to nurture a clot of far-fetched fears, really is the opiate of some people, Kristofferson knows, and he uses a Southern stratagem to slap at rednecks everywhere.

Kristofferson is more nearly a country singer than the other singers who have lately embraced country music. His accent is genuine. He's older and was exposed to country music naturally, as a matter of geography. Most of the others were exposed first to rock-and-roll and had to work backwards along one of its branches to find country. The phrasing and pronunciation Kris uses in Me and Bobby McGee are not terribly different from what you might hear in the voices of Ferlin Husky, Roy Drusky, or several other unpop-ed country singers. The arrangements in this recording are of the in-between variety so popular these days, using rock but not twangy sounds and using country but not raspy fiddle sounds. But these arrangements are scrupulously subdued; they support Kristofferson without making any bid to become the whole show. They are, in fact, a little light in the support department in a few spots. However, they do more good than harm, and that's rare, and we can thank producer Fred Foster for it.

Kristofferson's archetypical whiskey voice—if you could touch it, you might find its texture like that of a turkish towel—is what the record is about, and he isn't so much singing to you as surrounding you with images that tell tales of hoboes without trains. Beat the Devil; Me and Bobby McGee; Best of All Possible Worlds; Casey's Last Ride, Just the Other Side of Nowhere, and Sunday Mornin' are spun out to the listener with the assumption that he knows what it's like to be on the bum—but anyone who has been broke, thirsty, or lonely knows what it is like.

KRISTOFFERSON tosses out a better-than-average adage occasionally: "The devil haunts a hungry man." "Yesterday is dead and gone and tomorrow's out of sight." "There's nothing like a woman with her spell of make-believe to make a new believer of a man." But his lyrics don't have the gloss of self-conscious surrealism that so many other songwriters picked up by listening to Bob Dylan. Kristofferson's lyrics are straightforward and, in their way, generally graceful. Compare his songs with those of writers ten years his junior, those who are trying to say the same things, and you can see how experience—and even an Oxford education—can be helpful.

Kristofferson says he wants to affect people emotionally rather than intellectually—but any songwriter interested in survival wants to do that. The thing is that in order to write well for the viscera, one must have his own cerebrum in order, otherwise he won't know how thick to pour it on. Kristofferson, in this album, poured it on just about right.

KRIS KRISTOFFERSON. Kris Kristofferson (vocals, guitar); Jerry Kennedy (guitar); other accompanying musicians. Blame It on the Stones; To Beat the Devil; Me and Bobby McGee; The Best of All Possible Worlds; Help Me Make It Through the Night; The Law Is for Protection of the People; Casey's Last Ride; Just the Other Side of Nowhere; Darby's Castle; For the Good Times; Duvalier's Dream; Sunday Mornin' Comin' Down. MONUMENT SLP 18139 $4.98.
REGULAR readers of STEREO REVIEW's technical pages have been following the somewhat stumbling progress of four-channel stereo for over a year now. Most recently, Technical Editor Larry Klein's September 1970 article "The Four-Channel Follies" brought this progress up to date with discussion of the theories behind the various proposed systems, their prospects for general acceptance, and—most important—how they sounded. Few readers have had the opportunity to attend any of the public demonstrations of these systems, however, and even fewer have heard quadrasonic reproduction in their homes. For most people, then, any impression of the virtues of quadrasonic reproduction can derive only from whatever can be communicated about aural events in print, plus some amplification and/or distortion contributed by their imaginations.

Though I have hardly been as much in the dark about four-channel developments as most audiophiles, I was eager to try it for myself, and late last year I began experimenting with a multi-channel stereo setup at home. It works well within its limitations, it requires no special equipment or program material, and, as a listening experience, it is the closest thing to a "free" quadrasonic preview possible in this transition period.

The approach I have used is based on the work of David Hafler, president of Dynaco, Inc., and is certainly not a secret. For some time, Dynaco advertisements have featured "Four-Dimensional Stereo," the most recently evolved form of the Hafler system. (Interested readers can secure full particulars from Dynaco, 3060 Jefferson St., Philadelphia, Pa. 19121.) Most of my own experience has been with Hafler's original configuration, however, which requires only the addition of one or two extra speakers to a conventional stereo system, these being driven with a signal that is the difference between the two channels of a normal stereo recording.

To understand what this "difference" signal is (it is also referred to as an "A minus B" or "L minus R" signal) and where it comes from, it will be helpful to resort to a hypothetical recording situation. Imagine that you are looking downward onto a stage, as in Figure 1, where a solo clarinetist is playing (a clarinet's symmetrical radiation pattern makes it ideal for our example). Two microphones have been so placed that they are equally distant from the performer as well as off center by the same angle. Under these circumstances, the signals that come directly from the clarinet (and are picked up by the microphones) are very similar, if not identical, in phase, strength, and frequency. But the clarinet is radiating sound in many directions, not just straight into the microphones, and much of this sound ultimately reaches the microphones only after being reflected back by the interior surfaces of the hall. For example, one part of the sound, after leaving the clarinet, goes toward the left of the stage, bounces off the wall, and is reflected back toward the microphones. Obviously it will reach the left microphone an instant before it does the right one, and for that instant there will be a signal in the left channel that is not present in the right. Further, when the reflected sound does reach the right microphone, it might well arrive with a phase difference (for example, the right mike might be receiving a compression phase of the sound wave at the same moment the left microphone is receiving an expansion phase). The result would be an out-of-phase condition between the two channels for that particular part of the reflected sound. Finally, since the left mike is closer to the left wall than the right mike, the signal it picks up will be minutely stronger.

Thus, in our hypothetical example, the sound coming directly from the clarinet to the two microphones is the same for both, and it will be recorded in the
two stereo channels as identical signals—in effect, a mono signal. Any differences between the composite signals in the two channels—differences in arrival time, phase, and amplitude (signal strength)—will be caused by reflected sound. And it is precisely these differences that produce the stereo effect—the sense of "air" or hall acoustics around the performer. To appreciate what this feeling of space adds to the listening experience, simply switch your amplifier into the mono mode while playing a good stereo recording of a solo instrument; the "space" will disappear.

Unfortunately, even under the best of circumstances, the hall acoustics cannot extend much beyond the boundaries of the two speakers, although a good listening room and speakers may contribute, through their own properties, some little feeling of "openness" to reproduced sound. Suppose, however, that it were possible to extract from the two stereo channels a signal that represented the difference between them, and suppose that signal were fed to an additional speaker (or speakers). Such a difference signal would, in our clarinet example, be composed entirely of reflected or reverberant sound (some reflected sound would still be present in the regular stereo speaker, of course). The speakers reproducing the difference signal could then be placed somewhere behind or to the side of the listener, thereby achieving an extension of the stereo effect by reproducing part of the hall ambiance in a way not heard with conventional setups. This, incidentally, is the same goal that is aspired to by "classical" quadrasonic recordings in which the third and fourth channels handle mostly reverberant sound.

The sophisticated reader will immediately realize that modern recording techniques seldom conform exactly to our simple clarinet example. Also, because this example gives us only one "rear" signal to work with, we cannot have true four-channel stereo, in which all four speakers receive their own discrete signals. But for the many recordings in which the difference signal does embody a significant amount of reverberant sound, the setup I am about to describe provides a very worthwhile enhancement of the listening experience.

By now it should be clear that the difference signal on recordings is not a "gimmick," but constitutes a legitimate source of sound appropriate for reproduction through a rear channel. (Note that the term "recordings" also includes stereo broadcasts and tapes.) What then, can one expect to hear as a result of exploiting the difference signal in ordinary recordings?

(1). With mono recordings, nothing should be heard because, in theory, there is no signal to reach the rear speakers. However, if there is a slight difference in gain or frequency response between your two stereo channels, you may hear that when you put your ear close to a rear speaker. Any record scratches and surface noise will also come through, as will vertical turntable rumble and the vertical stylus motion caused by record pinch effect when present. In other words, nothing worth listening to.

(2). With stereo recordings of classical music you will find a great deal of variation in the rear-channel information from record to record. But even with those that are the least enhanced, there should be noticeable added fullness and body. The improvement could probably not be well demonstrated in an audio salon, but with familiar recordings being played in your living room it will be easily noticeable. Most recordings seem to be augmented in spread, depth, and brilliance—perhaps the result of more and better-distributed high frequencies. The bass gives the impression of rolling and surging through the listening area, and irregularities in bass response caused by listening-room acoustics are often less apparent. There is also a sense of increased loudness (some of which could be subjective) that is particularly evident during such musical events as heavy brass crescendos. As one would expect, organ music is almost always improved (most spectacularly in the bass), but I was unprepared for the "presence" imparted to many piano recordings that had previously seemed remote and somewhat bass-shy.

Listed below are a number of records that I and others have found particularly good for demonstration purposes. I also urge the reader to explore his present record collection for suitable material. He will almost certainly discover some recordings that work well, and the effect will be that much more dramatic because of his familiarity with their sound in normal two-channel stereo.
HANDEL: Ode for St. Cecilia's Day (Argo ZRG 563). This recording was made in King's College Chapel, Cambridge; the chapel's proportions are actually those of a small cathedral. Note especially the reverberation of the tenor voice in the opening recitative.

MAHLER: Symphony No. 2 (Philips 802884/5 LY). The fullness imparted to the chorus in the last movement and the "slap-back" from the brass playing staccato in the first movement reveal a warm, spacious acoustic. The loudest of the brass passages occurs two-thirds of the way through side one at the closing of the development section.

VERDI: Requiem (Columbia M2-30060). London's Royal Albert Hall has been used for recording purposes since its recent acoustic renovation. The vast interior dimensions are dramatically revealed during the Dies Irae.

(3). With stereo recordings of popular music (particularly rock), you may expect almost anything. Many pop recordings have never existed in a real acoustic environment as actual musical performances, but have been assembled in the studio from separate, essentially mono recordings of individual voices and instruments. These are then electronically "reverberated" and distributed between the two

HOW TO CONNECT THE REAR SPEAKERS

The least complicated method of deriving the difference signal from the regular stereo information requires only the addition of a speaker or two. Two series-connected speakers are to be preferred, not only because of the reduced amplifier loading they impose, but because it is often possible, if they are placed carefully, to achieve an illusion of stereo spread behind as well as in front of the listener. (It might be well at this point to interject a point of information: "stereo" means "solid," or three dimensions in space, though we owe our stereo sense perceptions to two eyes and two ears.)

The additional speakers are connected to the terminals of your present amplifier or receiver along with the front speakers as shown in Figure (a). The front speakers retain their normal mode of wiring; the rear speakers are connected in series, but out of phase with each other (minus to minus), across the two "hot" (+) terminals of the amplifier. In this configuration, each rear speaker will be in phase with its corresponding front speaker. (For a single rear speaker, phasing need not be considered.)

There will be a difference in voltage between the two hot terminals whenever the signals differ between the two stereo channels. This difference will cause a current to flow through the voice coils of the rear speakers, and they will therefore reproduce the difference signal.

If your present front speakers have an 8- or 16-ohm impedance rating, you should be able to connect additional speakers directly (and safely) to your present amplifier or receiver to derive the difference signal. If you have 4-ohm speakers, the alternative procedure described below should be used unless you are sure your amplifier will tolerate speaker loads under 4 ohms.

A single rear speaker may serve to produce a good multi-channel effect if it can be placed far enough behind or above your usual listening position. (Dynaco suggests that a single speaker attached to the ceiling above the listener's head works well.) If you use two speakers, place them at the wall behind and to either side of you and far enough away that you are not conscious of them as direct-sound sources.

Next, play a mono recording with the amplifier's mode switch set for stereo, and set the stereo-balance control so that there is no sound coming through the rear speakers (this should occur at about the center of the control's rotation). Now play a stereo recording. With all four speakers operating simultaneously, proper balance between the front and rear exists when the rear speakers are playing at a level just below the point at which you are conscious of instruments and voices originating from them when you are in your usual listening location. If they are too loud, connect in series with them a 25- or 50-ohm, 4- or 5-watt wirewound potentiometer (available in any electronics store for under $2.50) as a volume control.

An alternative method of setting up the rear speakers may prove more convenient in some cases. You will
channels by means of a mixing console. An instrument that seems to come directly from between the two front speakers could therefore be a mono signal present in equal amounts in both channels. If so, no hint of it will be heard from the rear speakers. On the other hand, an instrument present only in the left channel would be pure difference signal, and it would therefore come quite loudly through the left front speaker and the rear speakers. If you were seated close to the rear speakers and far enough away from the left front speaker, you might experience the instrument as coming from behind you or from some point between the left front and left rear. Such “special effects” will vary from record to record.

According to David Hafler, the following pop recordings have out-of-phase information that will definitely place certain sounds in the rear: “Blood, Sweat, and Tears,” Columbia CS-9720—voices in front, instruments all around in Spinning Wheel, side two; “Evening at the Boston Pops,” RCA LSC 2827—applause in rear on side one; “Lee Michaels,” A & M 4199—audience in rear on Hefty Hi.

Some of the problems encountered in working with the first method can be avoided by using two amplifiers. First is the question of speaker impedance mentioned earlier. Second, if you normally operate your amplifier with its balance control off center for some reason, the amplitude difference between the two channels may permit too much of the favored channel’s signal to get into the rear speakers. Finally, if the front speakers are of the sort designed to accept an electronically equalized signal from the amplifier and your rear speakers are not, a second amplifier will have to be used to bypass the equalization.

In addition to another amplifier, the second method requires a small, inexpensive transformer. (I used Lafayette’s Argonne No. AR-173, $2.90, though any driver transformer with similar impedance ratings—primary 5,000 ohms, secondary 3,000 ohms, CT—that come reasonably close to having a 1-to-1 ratio should work as well.) Solder each of the primary leads to the inner “hot” lead of a shielded cable terminating in a standard phono plug as in Figure (b). The shielding braids are not connected at the transformer ends, and should be taped so they do not protrude from the insulation. Only one shielded lead is connected to the transformer’s secondary leads—the inner-conductor lead to one and the shield to the other (it does not matter which is which). The transformer secondary’s center tap, if there is one, is not used.

Plug the two cables from the primary leads into the tape-output jacks of your present amplifier or receiver; the single cable for the secondary goes to an auxiliary or tuner input of the second amplifier. (If you have a stereo amplifier, use a left- or right-channel input and switch the amplifier into mono, or connect the cable to the inputs for both channels by means of an ordinary “Y” connector.

The rear speakers are connected to the second amplifier in the normal fashion, except that they should be wired out of phase with each other. Phasing between the front and rear speakers can be checked for correctness by ear. Low-frequency musical material is the most useful test signal for this purpose. Select a stereo recording that has a powerful, sustained bass section. Set the balance controls on the two amplifiers full to the right (clockwise) so that only the right speakers are playing, and place the right rear speaker close to and facing the right front. Play the recording and listen for the bass level. Now interchange the two cables (right channel to left and left to right) leading from the tape-output jacks of the main amplifier to the transformer (remembering to shut everything off before doing so), and listen again. Retain the mode of connection that yields the strongest bass performance, and return the right rear speaker to its original position. If you want to be doubly sure of your connections, you can go through the same process for the left speakers, but this time interchange only the two leads going to the left-rear speaker terminals. The volume and balance controls on the two amplifiers can now be used to balance the front-to-back and left-to-right levels as necessary.
In working with the difference-signal system, I quickly came to the conclusion that it shared some of the audible faults as well as the virtues of the discrete-four-channel demonstrations I have heard. For example, proper front-to-rear balance depends rather critically on the listener's position with respect to the speakers; and any noise (especially hiss) through the rear speakers quickly becomes distracting, probably because it originates from a direction other than that toward which one's primary attentions are directed. Also, current psychoacoustical theory has it that much of our ability to localize a sound source is based on the first instant of that sound to reach our ears. When high-frequency onset transients—particularly those of cymbals, tambourines, and similar percussion instruments—are heard through rear as well as front speakers, the result is confusion about the location of the sound.

Early in my experiments with the Hafler system I determined that the rear speakers, though they should have relatively smooth mid-range response, need not be large or expensive. In fact, the high-frequency output of full-range speakers can at times cause the kind of sound-source dislocation described in the preceding paragraph. As for low frequencies, if the bass performance of the front speakers is adequate for a given room, the additional contribution of large woofers in the rear sometimes proves to be too much, especially in the mid-bass region. At present I am using as rear speakers a pair of 5-inch mid-range drivers mounted in small sealed boxes. These are located in the rear corners of the listening room, facing upward from the floor so that the reflective properties of the intersecting walls direct the sound up and out. Thus installed, they are far enough from the listening location to be unobtrusive as direct sound sources, and the corner placement makes the most of their limited bass output. Other audio enthusiasts have achieved good results with small speakers positioned at the rear corners of the ceiling. In any case, since each listening room will present a slightly different set of circumstances, experimentation with both speakers and placement is in order.

Small inexpensive speakers with acceptable mid-range quality are available from a number of sources at under $15 each. Your local Lafayette, Olson, or Allied Radio Shack outlets probably have suitable house-brand systems that would be well worth trying. (I have heard a pair of $9.95 Realistic Minimus 0.5 speaker systems used with good results.) In general, the inexpensive speakers referred to as "air-suspension" or "acoustic suspension" seem to work best. When one considers that the rear amplifier (if you use one) can be correspondingly inexpensive—both because small speakers will tend to be relatively efficient and because they will not have to play as loud as the front speakers—it becomes clear that the cost of simulating a quadrasonic ambiance can be quite modest.

The object of the Hafler system is not, of course, to locate the listener in the midst of the performers (although a recording miked especially for the medium can do just that). For the most part, it leaves the orchestra on the stage up front, and the rear speakers merely contribute the "hall sound." Informed sources seem to feel that this is the treatment most classical music will get from discrete-four-channel stereo when it finally arrives. Pop recordings, on the other hand, will have voices and instruments coming at you from all directions. If you are a pop enthusiast, or if you like your music with kinetic effects, you will ultimately have to think in terms of rear speakers (and amplifiers) that are able to handle anything the front ones can. But for classical music, even speakers as modest as the ones I have described should serve most of the time. Already, however, there are some classical releases with antiphonal front-to-rear effects, and more are probably forthcoming—perhaps for lovers of Gabrieli.

While experimenting with the difference-signal system I also sampled some of Vanguard's quadrasonic classical releases now available on tape. In general, the aural perspective of the rear signals on the tapes (as reproduced by a four-channel tape deck) was quite different from that of the front signals. This made comparison with the Hafler effect difficult, but when only impact and "subjective realism" were considered, the difference-signal approach did not always come off second best. And even with genuine four-channel material of the ambiance type, the rear speakers seemed to do as well as larger units in virtually all cases. This might not be the case, of course, in another, perhaps larger, room. For example, some organ buffs maintain that full-size woofers in the rear channels are necessary to do justice to the near subsonic pedal notes.

In this rather free-form discussion of the Hafler difference-signal quadrasonic technique I have neglected a number of other "systems" that are being developed and demonstrated even as this is written. This is not because I feel that they lack merit, but simply that they all require some form of specialized hardware that cannot easily be borrowed from a friend, relative, or cooperative audiophile. In contrast, the Hafler system comes to you on close to a "free home-trial" basis, with no obligation to buy. If your experiences with it are as positive as mine have been, then you too will probably make the rear speakers a part of your permanent setup.
KARL LOEWE: DO TWO RELEASES EQUAL ONE REVIVAL?

_Telefunken and DGG offer recital programs that will be welcomed by art-song connoisseurs_

THE unjustly neglected German composer Johann Karl Gottfried Loewe (1796-1869) has never had it so good. His ballads (he wrote over 150 of them) have always enjoyed some circulation, particularly in the hands of such recitalists as Bender, Bohnen, Schlusnus, Hotter, and, more recently, Dietrich Fischer-Dieskau and Hermann Prey. But just now we not only have two recorded collections appearing simultaneously, but—miracle of miracles—there is not a single duplication between them. Whether this windfall will lead to a Loewe "revival" is questionable; he is rather more likely to remain a respected minor master whose art is too "German" and too narrowly specialized to create mass audiences or to attract any kind of lasting attention in recording studios.

The first disc, on the Telefunken label, marks Theo Adam's record debut as a recitalist. His program consists of nine relatively familiar Loewe ballads and, as might be expected of this experienced interpreter of such Wagnerian roles as the Flying Dutchman and Hans Sachs, he brings a lively dramatic presence to every one of them. The Romantic mood and content are convincingly captured, and Adam's dark bass-baritone proves a distinct asset in several songs. At times, though, his delivery is a bit heavy: the charming _Heinrich der Vogler_ calls for a lighter touch and a brighter tempo, _Der Nöck_ (which has been so engagingly realized by both Heinrich Schlusnus and Hermann Prey) for more delicacy. On the other hand, Adam has the dramatic skills to make the rather lengthy _Goldschmieds Töchterlein_ interesting, and he makes a remarkable thing of _Erlkönig_, which is almost as good a song as Schubert's. Adam's vocal endowments are sturdy rather than spellbinding, and it all adds up to a praiseworthy and enjoyable disc graced with touches of excellence.

Excellence surfaces more frequently in Deutsche Grammophon's Loewe collection—hardly a surprising matter wherever Dietrich Fischer-Dieskau is concerned. The collection itself is unconventional, for it mixes narrative ballads with lyric songs, demonstrating that the art of Loewe was more diversified than his heretofore limited discography would have led us to believe. Only two of the selections ( _Der getreue Eckhart_ and _Die wandelnde Glocke_ ) are recalled from previous recordings; the others are new to me. All the songs in this album are to texts by Goethe, several of them in the poet's humorous vein, which ranges from the playful to the macabre; Loewe never seemed to lack the right musical response to Goethe's various moods.

Fischer-Dieskau and Demus take _Der getreue Eckhart_ at a breathtaking pace and bring it off with dazzling virtuosity. _Canzonetta_ and _Wenn der Blüten_ are light, florid, Italianate songs; _Frühzeitiger Frühling_ is almost Schubertian.
The clever *Ich denke dein* is virtually irresistible; that such an ingratiating song could so long remain obscure is to me a mystery. *Der Zauberlehrling* is, of course, the Sorcerer’s Apprentice, and it tells the story immortalized by Paul Dukas—and Walt Disney.

Fischer-Dieskau lavishes his familiar interpretive mastery on these songs, all rewardingly written for both voice and piano. *Der Totentanz* and *Turmwächter Lynceus* give him passing problems with the tessitura, but, a few mannerisms aside, he handles all vocal challenges with distinction. In the lyrical songs such as *Canzonetta* and *Wandrers Nachtlied* (also known in the Schubert setting) he is probably unsurpassable.

Both pianists are admirable, but Jörg Demus gets the benefit of brighter and more complimentary reproduction from DGG.

George Jellinek

LOEWE: Ballads. *Der Wirtin Töchterlein; Süsses Begräbnis; Prinz Eugen; Der Nöck; Heinrich der Vogler; Erkönig; Goldschmieds Töchterlein; Tom der Reimer; Die Uhr. Theo Adam (bass); Rudolf Dunckel (piano). TELEFUNKEN SLT 43108-B $5.95.

LOEWE: Songs and Ballads Based on Goethe Texts. *Der Totentanz; Wandrers Nachtlied; Im Vorübergehen; Canzonetta; Frühzeitiger Frühling; Ich denke dein; Freibeuter; Der Zauberlehrling; Der getreue Eckhart; Gutmann und Gutweib; Turnmwächter Lynceus; Lynceus der Türmer; Wenn der Blätten Frühlingsregen; Die wandelnde Glocke; Gottes ist der Orient. Dietrich Fischer-Dieskau (baritone); Jörg Demus (piano). DEUTSCHE GRAMMOPHON 2530052 $5.98.

TWO JANÁČEK WORKS TRIUMPHANTLY REALIZED

Conductor Rafael Kubelik demonstrates insight and mastery in his countryman’s difficult music

With his new recording for Deutsche Grammophon of Leoš Janáček’s large-scale orchestral works *Taras Bulba* and *Sinfonietta*, conductor Rafael Kubelik has again risen to the extraordinary heights he scaled with his 1964 recording of the same composer’s Glagolitic Mass. The orchestral works are both products of the Moravian composer’s later years, when the combination of recognition in his own country and beyond and a late-realized love relationship sparked an extraordinary production: six operas, the Mass, the two orchestral works, and a half-dozen major chamber works.

The brilliant five-movement *Sinfonietta* with its multi-trumpet (twelve) finale has had more than half a dozen recorded performances since Kubelik’s first with the Czech Philharmonic just after World War II. A subsequent Kubelik recording done in 1956 with the Vienna Philharmonic for English Decca was never officially issued by London in the U.S. (a few copies were to be found, however). Now, in this new effort, Kubelik has surpassed not only all his own previous readings, but those of his very strong competitors as well: Claudio Abbado on London, George Szell on Columbia, and his fellow Czech Karol Ancerl on Parliament or Turnabout. The Kubelik reading here is taut and blazing in the same manner as his reading of the Glagolitic Mass; and the sound quality is so magnificently sizzling that at times I almost expected my speakers to go up in smoke.

Surprisingly, however, the *Sinfonietta* performance is as nothing compared to that of the far more difficult and complex three-movement *Taras Bulba*, a work based on Gogol’s account of the fifteenth-century Cossack leader and his running battles with his Polish and other adversaries. Kubelik’s 1959 performance on Capitol-EMI, not to mention the four or five other subsequent recorded versions, pale into insignificance beside the astounding evocation realized here. Janáček’s score is divided into three tragic episodes—the Death of Andrij, the Death of Ostap, and the Prophecy and Death of Taras Bulba—and the musical language in which he depicts these is one of extraordinary thematic economy, rhythmic complexity, and compressed expressionism that at times
suggest the montage technique of our Charles Ives.

The orchestral coloration is wholly individual, with highly unusual and effective use of percussion, organ, and bells. As with the later Janáček operas, only a conductor of the greatest skill, one with an insight into Janáček's special mode of musical speech, plus a highly cooperative virtuoso orchestra, can bring a piece like Taras Bulba to such vivid and pulsating life. Certainly none of the other recordings, not even those by Vaclav Talich and Karel Ančerl, have succeeded, though they might have with the kind of recording quality Deutsche Grammophon has given Kubelik.

In sum, Taras Bulba displays conductor and orchestra with a difficult and complex work completely in hand and recorded sound of a quality that will demand the best of even the very finest playback equipment. It is splendid proof, if proof were needed, of Rafael Kubelik's standing as a major performing artist.

David Hall

JANÁČEK: Taras Bulba—Rhapsody (1915-1918); Sinfonietta (1926). Bavarian Radio Symphony Orchestra, Rafael Kubelik cond. DEUTSCHE GRAMMOPHON 2530075 $5.98.

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ENTERTAINMENT

CAT STEVENS: GOOD, VERY GOOD, EXCELLENT
Folk and rock in a vocal style located somewhere between Jethro Tull and Neil Young

CAT Stevens' new album "Tea for the Tillerman" may not make him the rage of two or more continents, but that's mostly because even poetic justice is so elusive these days. My reference list of slightly battered hip phrases defines "monster" as "fantastic, tremendous, etc." This album is a monster. For it, Cat Stevens wrote three kinds of songs—good, very good, and excellent. In it he plays guitar with economy and drive and sings—to put it quite simply—better than any male solo vocalist now active in pop music. If that isn't enough, he also did the drawing for the cover of the jacket and did it well enough to convince me he could make a good living as a commercial artist.

Truly good vocalists—those who can hit the right note, have genuinely pleasant-sounding voices, and can convey delicate emotional nuances—are so rare I cannot think of anyone to compare Cat Stevens to. The best I can come up with is that he sounds a bit like a one-man Jethro Tull while sounding like a deeper-voiced Neil Young—and, yes, I'm aware of the great distance between those clichés.

Two of the songs are truly outstanding: arty little "Sad Lisa" and the calypso-styled "Longer Boats." The latter has the stuff to become a classic that will be sung forty years hence—if there is a forty years hence. The song "Father and Son," in which Stevens sings the father's part in his rich, sonorous baritone, and then sings the son's part in a high-tension tenor he affects with no apparent strain, also deserves special mention. As a lyricist dealing with the so-called generation gap, Stevens avoids the simplistic viewpoints and verbal clichés we hear every day. He does not nail the father's hide to the wall for urging the son to take it slow ("you will still be here tomorrow, but your dreams may not"), nor does he portray the son as an impudent neurotic. The writer, the singer, cares about both of them.

The album doesn't fit any category, although it is both folky and rock-like. It does require attention, but if your taste is anything like mine, you can give that readily, knowing that not a second of your time will be wasted.

Noel Coppage

CAT STEVENS: Tea for the Tillerman. Cat Stevens (vocals, guitar, piano); instrumental accompaniment. Where Do the Children Play; Hard Headed Woman; Wild World; Sad Lisa; Miles from Nowhere; But I Might Die Tonight; Longer Boats; Into White; On the Road to Find Out; Father and Son; Tea for the Tillerman. A & M SP 4280 $4.98.
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RICHARD STRAUSS:
Also Sprach Zarathustra

ON COLUMBIA RECORDS
RECORDINGS OF SPECIAL MERIT

BACH, J. S.: Cantata No. 21, "Ich hatte viel Bekummernis." - Edith Mathis (soprano); Ernst Haefliger (tenor); Dietrich Fischer-Dieskau (baritone); Munich Bach Choir and Orchestra, Karl Richter cond. Deutsche Grammophon Archive 2530499 $5.98.

BACH, J. S.: Cantata No. 36, "Schwingt freudig euch empor"; Cantata No. 64, "Sehet, welch eine Liebe." - Maria Friesenhausen (soprano); Andrea von Ramm (alto, in No. 36); Eva Bornemann (alto, in No. 64); Johannes Feyerabend (tenor, in No. 36); Hartmut Ochs (bass); Instrumental Ensemble and Westphalian Choir, Wilhelm Ehmann cond. Vanguard Everyman SRV 251 SD $2.98.

BACH, J. S.: Cantata No. 56, "Ich will den Kreuzstab gerne tragen"; Cantata No. 82, "Ich habe genug." - Gérard Souzay (baritone); Berlin Capella (choir, in No. 56); German Bach Soloists, Helmut Winschermann cond. Philips 897962 $5.98.

Performance: All first-rate
Recording: DG and Philips excellent, Everyman good

There are three out-and-out masterpieces here: the two bass cantatas, Nos. 56 and 82, and the relatively early No. 21, all of which are peaks of Bach's accomplishment in sacred music. They have also been recorded many times previously. In the case of No. 21, Richter's performance is a clear standout; the singing is superb (the two tenor arias alone would be worth the price), and the orchestral playing and choral work are among Richter's best efforts.

With the two bass cantatas, the alternate choices are more formidable. Yet, if Souzay's voice is a little dry and spread at this stage of his career, the singer's wonderfully expressive and sensitive interpretation is enough to place this disc among the very best of these two cantatas. The accompaniment, too, is first-class. If you don't already own these works, give this particular performance your most careful consideration—it is simply splendid.

The lesser-known Cantatas 36 and 64 deal with the Christmas season, and these are their only available recordings. Perhaps No. 64, with its ambitious opening chorus, is the more impressive of the two, but both cantatas are well worth knowing. The performances here have superb religious sentiment (as one always expects from their conductor, Wilhelm Ehmann); none of the vocal soloists are of real star quality, but they sing with expression and sympathy. The orchestral playing is not the last word in precision (this is definitely not the blockbuster virtuoso approach to Bach), but it is in the brief but very lovely slow movements that the eminent soloists, with Rosropovitch in the lead, really shine for me. The end movements are beautifully played, but I prefer the slightly more muscular and rhythmically pointed way Schneider handles them.

There are decided differences in recording balances between the two: Karajan and his soloists are very much of a piece; the Marlboro soloists are engineered in an almost "concerto grosso" style, yet without any loss of orchestral presence, and the room ambiance is decidedly more intimate than the largish hall sound of the Berlin recording.

Reviewed by DAVID HALL • BERNARD JACOBSON • GEORGE JELLINEK • IGOR KIPNIS
PAUL KRESH • ERIC SALZMAN • LESTER TRIMBLE
AUGIO FOR AUDIOPHILES
CIRCLE NO. 5 ON READER SERVICE CARD

Gloria, were very good indeed. The well-matched team of soloists acquires itself splendidly: Elaine Devon's Singing City Choirs are a marvel of discipline, precision, clarity, and tonal body; and the Philadelphia Orchestra is in top form. Above all, the recording itself exposes the total texture of Beethoven's polyphony to better advantage than any other I have heard. The combination of perfect microphon- ing and Ormandy's insistence on clarity of line and rhythm make this recording almost ideal for purposes of study and analysis. But when it comes to proving the extremes of exaltation and tragedy to be encountered in the Credo and Agnus Dei, I find myself turning elsewhere. In the celebrated martial sections of the Agnus Dei, there is, in Ormandy's performance, neither the sense of supplication conveyed by Karajan nor the sheer terror evoked by Bernstein. And Bernstein's handling of the unaccompanied Et resurrexit outburst by the chorus gives one the sense of actu- ally being present at the event. Overall, in fact, Bernstein sets the short hair rising on the back of my neck, while Ormandy leaves me admiring but essentially unmoved. This is not to say that Ormandy's is a cool reading. Rather, one might make an analogy of the two to the mountain climber who chooses the safe trail to the summit as against one who dares all with the most dangerous and challenging route. D.H.

RECORDING OF SPECIAL MERIT
BRUCKNER: Symphony No. 4, in E-flat Major ("Romantic"). Los Angeles Philharmonic Orchestra, Zubin Mehta cond. LONDON CS 6695 $5.98.

Performance: Superb
Recording: Superb

Zubin Mehta has come along way since his first Bruckner recording back in 1965, when he led the Vienna Philharmonic Orchestra through the slowest and fussiest slow movement of the Ninth Symphony on record. Here, in this latest recording of the most accessible and charming of the Bruckner symphonies, the "Romantic," he is no less low in fire and expansive to detail, but this tendency is subordinated to an abso- lute control over the architecture of the work and to an unflagging yet unobtrusive rhythmic pulse that keeps the music moving. The perfor- mance is enhanced by the most gorgeous recorded sound ever accorded any work by the great Austrian symphonist. I would crit- icize (only mildly) a certain tendency toward overbalancing in favor of low strings and brass in the early parts of the opening movement, but this is of small moment compared to the sense of the whole that Mehta manages to conjure from this often episodic score. I have in mind the ruminative interludes of the cortège-like slow movement and the trio sections of the famous "hunting" scherzo, in which Mehta's careful phrasing, dynamic nuance, and tonal coloration makes these bits of genuine interest relative to the more spectacular pages that sur- round them, rather than dull moments to be gotten through as best one can. I have always had special affection for Bruno Walter's somewhat more expansive treatment of the Bruckner "Romantic," despite a somewhat shallow recorded sound, but the sheen ex- citement and the magnificent recorded sound of this disc have turned my head.

D.H.

RECORDING OF SPECIAL MERIT
BYRD/TALLIS: Cantiones Sacrae 1575 (complete). Cantiones in Ecclesia, Michael Howard cond. L'ORCHESTRE LYRE SOL 311/2/3 three discs $17.85.

Performance: Superior
Recording: Excellent

In 1575, Queen Elizabeth granted an extraor- dinary favor to the two joint organists of the Chapel Royal, Thomas Tallis and William Byrd: a twenty-one-year monopoly "to imprint and so many as they will of set songs or songs in partes, either in English, Latin, French, Italian or other tongue that may serve for musick either in Church or Chamber, or otherwise be plac'd or sung." The immediate result of this decree was the publication (their...
It took the Class of '72 to appreciate this rebel of 1888.

He wrote his scores in red ink without bar lines. There are named them "Chapters Turned Every Which Way," "Mysterious Kiss in the Eye," "Truly Limp Preludes for a Dog," "Pieces in the Shape of a Pear." No wonder Paris called Erik Satie odd!

Yet beyond his eccentricity, his music lives in crystalline beauty. Its biting spirit and economy marked the first real break with Romanticism. Nor was his influence limited to music. He became a key figure in the avant garde of Cocteau, Picasso, Diaghilev, Musset, and Debussy—a group that reshaped all the arts.

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Maybe it took recordings like these to help us all understand Satie. Maybe it took today's audience to hear his simplicity and purity. Maybe it took both.

APRIL 1971

CIRCLE NO. 4 ON READER SERVICE CARD

It is the second complete recording of Bank Ban, the Hungarian national opera. Its predecessor, a not too satisfying mono version, was reviewed here in September 1961. Since the work is so little known, some background information may be useful to the reader.

The opera deals with an episode taken from Hungary's turbulent history. In this particular instance (thirteenth century), the King is away leading his armies on a military mission. Courtiers grouped about the foreign-born Queen oppress and exploit the people, and soon the country is in the throes of an uprising. Bank

ERKEL: Bank Ban. Jozsef Simándy (tenor), Bank Ban; Karola Ágár (soprano), Melinda; Erzébet Komály (mezzo-soprano), The Queen; András Faragó (baritone), Petőr; József Réti (tenor), Otto; György Melis (baritone), Tibórc; others. Chorus of the Hungar

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-Bob Biggs-

Handel: Messiah, Joan Sutherland (soprano); Huguette Tourangeau (mezzo-soprano); Werner Krenn (tenor); Tom Krause (bass); Dermot Coleman (boy soprano); Valda Aveling and Brian Runnett (harpischords and organ); Ambrosian Singers and English Chamber Orchestra, Richard Bonynge cond. LONDON OSA 1396 three discs $17.94.

Performance: Absurd, Recording: Adequate

If the notion of Handel's Messiah as the laughter of the year grabs you, this set should give ample satisfaction. The performance Richard Bonynge directs has a strong claim to being the funniest ever recorded of this deeply spiritual work. In its quite different way, it is just as ludicrous as the caricatures that used to be turned out by such masters of Victorian Baroque as Sir Thomas Beecham and Sir Malcolm Sargent.

Here, instead of the monumental gone mad, we have the trivial gone mad. Copyist embellishment and appropriate chamber-sized forces replace the puritanically bare line and the massive Crystal-Palace performing apparatus of the earlier English worriers. But the trappings of authenticity are applied without any true appreciation of their nature and purpose.

I thought I yielded to no one in my enthusiasm for ornamentation in Baroque performance, but I find I yield to Bonynge by a wide margin. He embellishes to such a degree that you can rarely discern the original line of the music under all the incrustations. The ornamentation is entirely the conductor's taste, perfectly tasteful to the absolutely impossible, often within a single phrase, partly because the conductor has aimed at a variety of articulation in parallel circumstances that is totally foreign to the Baroque mind. And the lack of spontaneity is underlined by the fact that the ornaments are almost as abundant in orchestral and choral lines—where they have no historical justification—as in solo passages.

The general character of the interpretation is robbed of any remaining validity both by Bonynge's — (Continued on page 76)
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talks about the
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nyenge's predestination for ridiculously fast tempos and, despite the size of his forces, by the unsuitably self-edged, romantic tone he draws from them. The latter fault is accentuated by the over-resonant acoustic of the recording, from which even the excellent choral contribution of John McCarthy's Ambrosian Singers emerges as through a dim pious haze.

Then there is the solo singing, which sounds as if it is going on in four different languages. You will realize the extent of the problem when I say that the best diction comes from Joan Sutherland, who floats an appealing simple matter for conductor or producer to imitate: her sonorous, mechanical assurance of the belief that "we shall be as the heavens and the earth" and unimpressive them, so that what we hear are threats to "shake" and "ch" sounds, to hint vaguely of the effect of Marlowe's mighty line pale beside the impact of this superb new recording. For some reason that escapes me, Bonynge edits Marlowe's sonorous, mechanical assurance of the belief that "we shall be as the heavens and the earth" and unimpressive them, so that what we hear are threats to "sh" and "ch" sounds, to hint vaguely of the effect of Marlowe's mighty line pale beside the impact of this superb new recording. The credit must, of course, go first to Handel and to his uncommonly skilled librettist Nicola Haym. Tamerlano, composed in 1724, between Giulio Cesare and Rodelinda, is a masterpiece of profound dramatic force and ex-

for what, after all this, the fact is worth. Bonynge is the standard modern "complete version" except in three small particulars: he takes the short, eleven-measure version of the Pifa (or Pastoral Symphony), which is reasonable since Handel himself seems to have reverted to it in later life; he gives the opening vocal line of the duet "He shall feed His flock" three times instead of twice, which may be a tape editing error; and he makes a hair-raising cut of sixty-three measures in the da capo (or rather, in this version, dal segno) of "The trumpet shall sound."

In making comparisons, I went back to Colin Davis' Philips recording with some trepidation after two years away from it, fearing my former enthusiasm would have evaporated. On the contrary, Davis' performance now seems even better than I remembered it, and it remains easily my first choice. Charles Macarow for Angel is the closest rival, and the recent Vanguard recording by Johannes Somary (which, as Igor Kipnis said in his December review, has some fine solo and ensemble work, but which suffers from a milder case of Bonynge's unscholarly penchant for choral and orchestral embellishment) goes easily, for my taste, into third place. The Bonynge performance, on the other hand, belongs at the bottom of any conceivable pile.

**RECORDING OF SPECIAL MERIT**

**HANDEL: Tamerlano. Gwendolyn Killebrew (mezzo-soprano), Tamerlano; Alexander Young (tenor), Bajazete; Carole Bogard (soprano), Asteria; Sophie Steffan (mezzo-soprano), Andronico; Joanna Simon (mezzo-soprano), Irene, Marius Rintzler (bass), Leone; Albert Fuller (harpischord); Lars Holm Johansen (cello); Chamber Orchestra of Copenhagen, John McCarthy cond. CAMBRIDGE CRS B2902 four discs $23.92.**

**Performance: Enthralling**

**Recording: Very good**

Marlowe's Tamburlaine the Great, in the London Old Vic production with Donald Wolfit, is one of the most vivid theatrical memories of my youth. Handel's Tamerlano is literally a different story, concentrating on the captive emperor Bajazete and his proud devotion to his daughter Asteria in place of Marlowe's more martial preoccupations, and it is, besides, a representative of that maligned genre opera seria, which is popularly supposed to submerge the loftiest situations in an ocean of interminable recitative and formalistic aria.

But even my scenically enhanced memories of the effect of Marlowe's mighty line pale beside the impact of this superb new recording. The credit must, of course, go first to Handel and to his uncommonly skilled librettist Nicola Haym. Tamerlano, composed in 1724, between Giulio Cesare and Rodelinda, is a masterpiece of profound dramatic force and ex-

**dreams of winter.**


The brilliant Michael Tilson Thomas conducts the Boston Symphony Orchestra through the Winter Daydreams of Tchaikovsky's Symphony No. 1. 253C 103
Herbert Barrett

Herbert Barrett

Yet a fair proportion of the praise must also be reserved for Cambridge's producer, Charles Fisher, and his excellent body of artists. Here, at last, is a Handel opera recording that can be counted an almost unqualified success.

Its defects are all minor and can be disposed of briefly. The orchestral playing is serviceable rather than brilliant, and the singers of the two smallest roles, Irene and Leone, are admirable artists whose voices are not really suited to this kind of music. There are one or two tiny hiatuses in the performance that stand like the results of imperfect tape-editing. Cadential trills are sometimes missing, and just now and then a rhythm may be unidiomatically interpreted, or an embellished line may depart too radically from its basis in the score.

But in all the major areas of performance practice and of musical and dramatic approach, conductor John Moriarty's conception is boldly and triumphantly right. With the above small reservations, he has demanded exactly the appropriate amount of ornamentation from his singers, and the ornaments themselves are admirably stylish (though in a purely negative sense the neglect of that important Baroque embellishment, the slide, is surprising). His choice of tempos for the arias and other set pieces is unfailingly judicious. And in the recitative he has inscribed on truly dramatic pacing and inflection—there is none of that pius moaning about that is unsuitable enough in Handel oratorio and quite unconscionable in opera. Instead we are swept along, as we should be, by the passionate intensity of the action.

This is a superbly committed and engaging interpretation. I am all the more delighted that the pernicious practice of assigning what were originally castrato parts to baritones has been avoided, and that the opera is given virtually uncut, with the few small excisions clearly indicated in the libretto and translation booklet. The total timing falls only about twenty minutes short of the four-hour duration of the recent Deutsche Grammophon Giulio Cesare, but the stylistic conviction of Moriarty's direction produces results far different from the tepid engendered by Karl Richter's lily-livered and utterly unauthentic literalism in the DGG effort.

All of these virtues, along with the exciting continuo playing contributed by Albert Fuller and Lars Holm Johansen, would have been wasted without first-rate solo singing. Happily, the four biggest roles are all magnificently taken. Bajazet is, in all but name, the hero of the piece, and Alexander Young gives the latest and one of the best in his long line of splendid Handel performances, making his noble death scene the dramatic focal point it should be. Carole Bogard covers the full range of Astrea's character, from the pathos of 'Se m'assi giorno, Mio' to the deliberate nastiness of 'Non è più tempo, no,' and floats some admirably pure lines, as does Sophia Steffan in her likably modest interpretation of Andronico.

Perhaps the most remarkable achievement of all is the proud, penultimately thwarted Tamerlano of Gwendolyn Killebrew, a young American mezzo whose voice and technique I have admired on a number of occasions over the past four years. In this performance she reveals a force and authority of expression that are new to her work—the bite of her diction and the clarity of her articulation suggest that she has outgrown the prodigy stage and is now in the process of becoming an artist of real substance. Her stride forward could not have come at a better juncture than in this Cambridge Tamerlano, the best Handel opera recording I have ever heard.

**RECORDING OF SPECIAL MERIT**

HOLST: The Planets, Op. 32. London Philharmonic Orchestra and John Alldis Choir,
Bernard Haitink cond. PHILIPS 6500072 $5.98.

Performance: Brilliant
Recording: Superb

It's a close race between Bernard Haitink and Sir Adrian Boult (who gave the 1918 premiere) for the honor of giving us the best recorded performance of GustavHolst's picturesque astrological suite. Mars, the Bringer of War takes on a far more menacing and steamroller-like aspect at Haitink's more deliberate tempo and with the greater presence accorded by the Philips recording staff. Both David and Haitink engineers also seem to favor a greater mid-range emphasis in their recorded sound, with a resulting thinness of bass texture compared with Haitink's recording. Venus, the Bringer of Peace fares beautifully under both conductors. Boult's is warmer in tonal texture, Haitink's more refined. As for Mercury, both performances are of the greatest brilliance and delicacy, and superbly recorded. Boult's Jupiter comes forth with more spontaneity in both his exuberant and solemn aspects; and though both conductors are equally eloquent in Saturn, the Bringer of Old Age, it is sonic impact that gives the edge to Haitink, especially in the great outcry for brass that marks the climax of the movement and the turning point toward serene acceptance.

Uranus is Haitink's all the way. His more urgent rhythmic pulse creates terrific tension, and the whole movement has just the right mix of grotesquerie, fun, and terror. For the first time in any recording, the great organ glissando at the climactic movement is fully audible and wonderfully effective. Neptune, with its oftstage wordless choir, is the great test-piece in The Planets. Like the final pages of the Vaughan Williams Sixth Symphony, of which it is a forebear, flawless nonvibrato playing and absolute control of pianissimo dynamics are the sine qua non, along with perfect internal balances and intonation. Given equally accurate and sensitive performances, and I think Boult and Haitink do, the outcome rests with the recording engineers; and save for one flaw, the Philips crew comes out ahead. Boult's choir, compared with Haitink's, is too close, thereby losing the all-important disembodied, ethereal quality needed in the closing pages. However, it is Boult's engineer who has the finer hand in the fader at the point where the wordless voices disappear into infinity. It is wholly natural and inevitable, whereas the engineer's touch is evident on the Philips disc.

I shall be holding onto both for musical reasons, but for equipment demonstration, it would be Haitink I would reach for.

D.H.

JANÁČEK: Taras Bulba—Rhapsody; Sinfonia (see Best of the Month, page 68)

KOKKONEN: Sinfonia (see NORDHEIM)

LOEWE: Ballads; Songs and Ballads Based on Goethe Texts (see Best of the Month, page 67)

RECORDING OF SPECIAL MERIT

MOZART: Divertimenti: in E-flat Major (K. 166); in B-flat Major (K. 240); in F Major (K. 213); in E-flat Major (K. 252). Netherlands Wind Ensemble, Edo de Waart cond. PHILIPS 6500002 $5.98.

Performance: First-class
Recording: Excellent

This music certainly does divert in these crisp, beautiful performances by first-class Dutch wind musicians. I wouldn't say the tonal quality is perfect, but it is just about as close to it as we have any right to expect. The recording is pretty good, too. All I want to add is—enjoy.

E.S.

NORDHEIM: Eco, for Soprano, Children's Choir, Mixed Choir, and Orchestra. Taru Valjakka (soprano); Children's Choir from Stockholm music classes; Swedish Radio Symphony Orchestra, Herbert Blomstedt cond. KOKKONEN: Sinfonia III. Stockholm Philharmonic Orchestra, Sergiu Comissiona cond. ODSEON CDSDS 1086 $5.98.

Performance: Presumably authentic
Recording: Very good

This is the first of four volumes of Scandinaviaan music derived from performances at the 1969 Nordic Music Days held by the Nordic Composers' Council with grants from the Nordic Cultural Fund. The wide range of music performed at these events is well represented by the two extremes placed back to back on this disc: a Finnish symphony right out and an "avant-garde" cantata by the Polish-Italian manner. Actually it would be misleading to overemphasize the derivative aspects of these works, since both have individuality within their highly distinct romantic and contemporary idioms. The Nordheim, written in a dense kind of postexpressionism, uses a whole arsenal of instrumental, choral, and solo

(Continued on page 80)
Much has been said about the Heathkit® AR-29.

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High Fidelity, September 1970 —
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Elementary Electronics, September-October 1970 —
“...it’s quite likely that many, if not most, users will consider the AR-29 the best buy in receivers. Even a nitpicker would have trouble finding fault with the AR-29.”

Stereo, Winter 1971 —
“An exceptionally good value for the kit builder; set meets or exceeds specifications without need for professional alignment or adjustments; one of the best performing receivers available in any form.

Audio, August 1970 — C.G. McProud on the AR-29:
“The Heathkit AR-29 is a worthy companion to the famous AR-15 — somewhat easier to build, somewhat lower in power, somewhat less expensive — but nevertheless a superb receiver in its own right.

...measured distortion of 0.15 per cent as typical over most of the audio range, even though the specifications rate the receiver at a distortion of 0.25 per cent.”

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“... its performance should satisfy the most critical audiophiles thoroughly.”

Popular Electronics, April 1970 —
“How does a company that is reputed by the experts and hi-fi fanatics to be the maker of the world’s finest top-of-the-line stereo receiver (AR-15) outdo itself? Simple (or so it seems) It proceeds to make the world’s finest medium-power, medium-price stereo receiver. This is exactly what the Heath Company has done with its Model AR-29 receiver. For features and styling, the AR-29 is, in our opinion, a triumph of modern technology.”

“The assembly/operating manual that comes with the kits bears the usual Heath mark of excellence.”

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Stereo Review, April 1970 — Julian Hirsch on the AR-29:
“...its FM tuner had an IF sensitivity of 1.75 microvolts, placing it among the finest in respect to sensitivity.”

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E.S.

RECORDING OF SPECIAL MERIT


Performance: Good to outstanding

Recording: Excellent

No other soprano before the public today can match the combination of vocal beauty, emotional involvement, and artistic control that characterize the work of Montserrat Caballé when she is in good form. The present recital does not represent her at her consistent best, but the peaks are beautiful, and the valleys are higher than most sopranos’ peaks. She is an unman-nered singer, singing the notes as the com-poser wrote them, imparting eloquence and lyricism when needed, always clothing her ut-terance in a luscious sound. Color and dynam-ics are artistically employed in her singing; her scale is even, and, if high and low passages reveal an occasional shrillness, her heavenly pi-anò passages are a disarming compensation for them.

The tragic arias here—“Vissi d’arte,” “Un bel di,” “Sola, perduta, abbandonata”—are particularly effective. I feel that “O mio babbno caro,” though well vocalized, fails to catch Lauretta’s youthful radiance, and the conduc-tor’s slow pacing is no help. Liu’s two arias are likewise not fully convincing. Her vocal velvet is always in evidence, but the phrases are not really caressed, and, though ‘Signore, ascolta’ ends on a ravishing soft B-flat, the phrase that precedes it (“Liu non regge più”) is imperfect in intonation.

These relatively minor blemishes do not de-tract from the great general appeal of this recital. I do not see why the music of “Tu, tu, piccolo iddio” should not have continued right up to the end of the opera instead of being given the concert ending it has here, but the unfamil-iar Le Villi excerpt may make me think twice about that reservation too. The orchestral accompaniments are good, and the recorded sound is sumptuous.

E.G.

SATIE: Parade; Relâche; Gymnopédies Nos. 1 and 3 (orch. Debussy); Royal Philharmonic Orchestra, Philippe Entremont cond. COLUMBIA M 30294 $5.98.

Performance: Riech

Recording: Excellent

Parade is the “realist ballet” that Erik Satie wrote with Jean Cocteau, it is one of the first European works to use American jazz or rag-time and unquestionably the first to feature typewriters, sirens, and pistol shots as parts of the score. Relâche, with a scenario and decor by Francis Picabia, is described as an “instantaneous ballet in two acts, film intermezzo, and the tail of a dog.” Between these two ballets, the history of Dada music theater is about cov-ered—Relâche is the word used in French thea-ter bills to mean “no performance tonight” (thus, any time nothing else is being per-formed in a French theater, Relâche is auto-matically featured). The original included a cinematic interlude in which almost all the famous Parisian artists and poets of the day can be seen and which is, without a doubt, one of the funniest bits of film ever made. The music itself consists of a series of pleasant, smallish bits, mostly of a quiet lyrical character that seems hardly related to the Dada or proto-surréalist character of the whole—but then that’s probably part of the Dada. Parade, the earlier work by seven or eight years and much better-known, is also much the better music—shmatzler, campier, jazzier, more inventive, more amusing, and more together. I would have preferred a more incisive, drier, wittier performance of this music. But Entremont in his new role as a conductor and the English

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VERDI: Four Sacred Pieces: Ave Maria; Stabat Mater; Laudi alla Vergine; Te Deum
Yvonne Minton (mezzo-soprano); Los Angeles Master Chorale (Roger Wagner director); Los Angeles Philharmonic Orchestra, Zubin Mehta cond. LONDON OS 26176 $5.98.

Performance: First-rate
Recording: Excellent

Faced with a good performance of these miraculous creations of Verdi's final years, the listener finds his spirit uplifted and his senses utterly gratified; the thought that such results can come only from a painstaking and dedicated effort may not even occur to him. The fact is, however, that the rich and subtly interlaced choral and orchestral textures pose great interpretative demands. The Messrs. Mehta and Wagner have risen to the challenge admirably. The tension and emotionalism of the music—Verdi past eighty was still Verdi—bring out Mehta's best qualities, and the orchestra and chorus reveal to his leadership a soundness of evidence and precision. The choral intonation in the unaccompanied Laudi is remarkable, and the tricky balances in the Ave Maria—the "enigmatic scale" on which it is based must be clarified, but without obscuring the harmonics. Mehta's component notes—mezzo-soprano; Brangane; Dietrich Fischer-Dieskau (baritone); Kurwenal; Philharmonia Orchestra, Wilhelm Furtwängler cond. SERRAPHIM 00145 $2.98.

WAGNER: Tristan and Isolde (highlights). Kirsten Flagstad (soprano), Isolde; Ludwig Suthaus (tenor), Tristan; Blanche Thebom (mezzo-soprano), Brangane; Dietrich Fischer-Dieskau (baritone), Kurwenal; Philharmonia Orchestra, Wilhelm Furtwängler cond. SERRAPHIM 00145 $2.98.

Performance: Good to superb
Recording: Seraphim far superior

Flagstad with Furtwängler and Ormandy—these budget-priced discs are a tempting two-some indeed! But they are quite unequal. Seraphim offers the Flagstad of 1952, still magnificent and secure, but her vocal lustre is barely present in a glowing orchestral setting that is still attractive sonically. Each new exposure brings renewed admiration for Furtwängler's superb command of this music, the sustained lyricism and singing tone it imparts to it, the admirably balanced sonorities, the absolutely magical realization of the Brangäne episodes of the Liebesnacht. The Flagstad legato is similarly breathtaking: after all these years one is still unprepared for such incredible phrases as "Der Liebe Bund" (side two, band one), with (Continued on page 86)

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APRIL 1971
**“RAGTIME OF THE HIGHER CLASS”**

Scott Joplin’s elegant and infectious piano rags are revived on a new Nonesuch disc

By H. Wiley Hitchcock

Ragtime had probably existed for a long time before it rose to public consciousness and became a national mania in the 1890’s. Then associated primarily with the solo piano and especially the increasingly popular popular concert hall, it was taken over by dance bands as well (along with blues, it was the staple of early jazz), and, in the diluted form of the cakewalk march, by such concert bands as Sousa’s. After a short, happy life as vehicle for the most popular dances of the early part of the century, it faded during the 1920’s as other kinds of dances and music became popular.

Ragtime’s most characteristic feature was its double plane of rhythmic life: a regularly accented, even bass and a strongly cross-accented treble. Against the bass, which normally stomped along in a heavy two-beat or pranced in a brass-brand-like oom-pah pattern, the treble was “ragged” by throwing accents onto sub-beats. This kind of rhythmic interplay was rooted in black music; it has been traced back to the “patting Juba” of Southern blacks before the Civil War, and ultimately to Afro-Caribbean dances and West African drumming. On the other hand, the form and the basic meter and tempo of rags came from Euro-American dances (quadrilles, polkas, schottisches) and especially from post-Civil War marches, with their heavy two-beat meter and their easygoing tempo. The best-known early piano rag to be published, Scott Joplin’s Maple Leaf Rag, is marked “Tempo di Marcia”; Joplin elsewhere indicated “Slow March Tempo” and even cautioned performers, “Notice! Don’t play this piece fast. It is never right to play ‘Ragtime’ fast.”

Although its musical sources were both black and white, ragtime itself was the product of blacks, especially of itinerant piano players in the Middle West. Scott Joplin began his career as one. Born in Texarkana, Texas, on November 24, 1868, he learned to play the piano as a boy. By 1885 he was in St. Louis, playing in honky-tonks and sporting houses. He stayed there until 1893, then went to Chicago briefly to try his luck in the entertainment halls that had sprung up around the World’s Fair. In 1894 he went to Sedalia, Missouri, to stay until the turn of the century. His first published piano rag, Original, came out in March, 1899; later the same year, a Sedalia music dealer issued Maple Leaf Rag, named for a saloon and dance hall in the town. The work was an instant and resounding success; Joplin’s career as a composer took wing, and before his death in 1917 he was to publish more than thirty original rags, and both piano pieces, songs, and arrangements as well, with such success that he could claim to be “King of Ragtime.” He had even grander aims: in 1902 he finished a ballet score called Rag Time Dance, and in 1903 the opera A Guest of Honor, unpublished and now lost; in 1911 came another opera, Treemonisha. None of these larger works were successful. Like other American composers of popular music both before and after him (William Billings, Stephen Foster, and George Gershwin come to mind), Joplin’s talent was greater than his training, and his craft as a composer was simply not up to full-evening works.

Joplin’s piano rags are a different story. Within their relatively narrow confines—each is made up of four or five contrasting strains and lasts about four or five minutes—they are just about perfect music by any standard. Joplin himself was annoyed by the condescending attitude toward ragtime displayed by many of his contemporaries, although he was well aware of the musical poverty of some of the rags thrown up by the wave of popularity for the genre around the turn of the century. In a brief manual of ragtime exercises published in 1908, he wrote: “That all publications masquerading under the name of ragtime are not the genuine article, and trashy music, but ‘ragtime of the higher class,’ would definitely approve. Moreover, for this recording, whose sound has remarkable presence to begin with, Riffkin must have found the kind of piano the American virtuoso Louis Moreau Gottschalk once spoke of in his journal, a ‘monster’ with a tail three feet in width and ten feet long: the piano sound, from deepest bass to highest treble, is marvelously rich. Finally, the jacket notes, written by Riffkin himself—he is, among other things, a brilliant young musicologist—are exemplary: broadly informative, impeccable, precise, and gracefully written.

**RAGTIME OF THE HIGHER CLASS**  
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By H. Wiley Hitchcock

Ragtime had probably existed for a long time before it rose to public consciousness and became a national mania in the 1890’s. Then associated primarily with the solo piano and especially the increasingly popular popular concert hall, it was taken over by dance bands as well (along with blues, it was the staple of early jazz), and, in the diluted form of the cakewalk march, by such concert bands as Sousa’s. After a short, happy life as vehicle for the most popular dances of the early part of the century, it faded during the 1920’s as other kinds of dances and music became popular.

Ragtime’s most characteristic feature was its double plane of rhythmic life: a regularly accented, even bass and a strongly cross-accented treble. Against the bass, which normally stomped along in a heavy two-beat or pranced in a brass-brand-like oom-pah pattern, the treble was “ragged” by throwing accents onto sub-beats. This kind of rhythmic interplay was rooted in black music; it has been traced back to the “patting Juba” of Southern blacks before the Civil War, and ultimately to Afro-Caribbean dances and West African drumming. On the other hand, the form and the basic meter and tempo of rags came from Euro-American dances (quadrilles, polkas, schottisches) and especially from post-Civil War marches, with their heavy two-beat meter and their easygoing tempo. The best-known early piano rag to be published, Scott Joplin’s Maple Leaf Rag, is marked “Tempo di Marcia”; Joplin elsewhere indicated “Slow March Tempo” and even cautioned performers, “Notice! Don’t play this piece fast. It is never right to play ‘Ragtime’ fast.”

Although its musical sources were both black and white, ragtime itself was the product of blacks, especially of itinerant piano players in the Middle West. Scott Joplin began his career as one. Born in Texarkana, Texas, on November 24, 1868, he learned to play the piano as a boy. By 1885 he was in St. Louis, playing in honky-tonks and sporting houses. He stayed there until 1893, then went to Chicago briefly to try his luck in the entertainment halls that had sprung up around the World’s Fair. In 1894 he went to Sedalia, Missouri, to stay until the turn of the century. His first published piano rag, Original, came out in March, 1899; later the same year, a Sedalia music dealer issued Maple Leaf Rag, named for a saloon and dance hall in the town. The work was an instant and resounding success; Joplin’s career as a composer took wing, and before his death in 1917 he was to publish more than thirty original rags, and both piano pieces, songs, and arrangements as well, with such success that he could claim to be “King of Ragtime.” He had even grander aims: in 1902 he finished a ballet score called Rag Time Dance, and in 1903 the opera A Guest of Honor, unpublished and now lost; in 1911 came another opera, Treemonisha. None of these larger works were successful. Like other American composers of popular music both before and after him (William Billings, Stephen Foster, and George Gershwin come to mind), Joplin’s talent was greater than his training, and his craft as a composer was simply not up to full-evening works.

Joplin’s piano rags are a different story. Within their relatively narrow confines—each is made up of four or five contrasting strains and lasts about four or five minutes—they are just about perfect music by any standard. Joplin himself was annoyed by the condescending attitude toward ragtime displayed by many of his contemporaries, although he was well aware of the musical poverty of some of the rags thrown up by the wave of popularity for the genre around the turn of the century. In a brief manual of ragtime exercises published in 1908, he wrote: “That all publications masquerading under the name of ragtime are not the genuine article, and trashy music, but ‘ragtime of the higher class,’ would definitely approve. Moreover, for this recording, whose sound has remarkable presence to begin with, Riffkin must have found the kind of piano the American virtuoso Louis Moreau Gottschalk once spoke of in his journal, a ‘monster’ with a tail three feet in width and ten feet long: the piano sound, from deepest bass to highest treble, is marvelously rich. Finally, the jacket notes, written by Riffkin himself—he is, among other things, a brilliant young musicologist—are exemplary: broadly informative, impeccable, precise, and gracefully written.
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And its patented anti-skating control is permanently accurate.

The six Garrard component models range from the 40B at $44.50 to the SL95B (shown) at $129.50. Your dealer can help you select the right one for your system.

CIRCLE NO. 103 ON READER SERVICE CARD
LUDWIG VAN BEETHOVEN was born on December 15 or 16, 1770. On or about December 15 or 16, 1970, there descended upon this office such a raft of complete recorded this and that of Beethoven that it would take until the end of 1971 to have it reviewed in the usual manner. A few of these packages are completely new; most are simply repackagings of material already issued either as single records or in smaller, less comprehensive albums. Some of the material is making its third or fourth recorded go-around, merely changing its outer costume and its serial number. I find it doubtful that all these records rolled in here at the time they did just to celebrate Beethoven’s birthday in its proper month of the year. I think it much more likely that companies were honoring Beethoven’s foresight in coming into this world that companies were honoring Beethoven’s birthday in its proper month of the year. I think it much more likely that companies were honoring Beethoven’s foresight in coming into this world that companies were honoring Beethoven’s foresight in coming into this world.

I have listened, in recent weeks, to four complete sets of the piano sonatas: Paul Badura-Skoda (Musical Heritage Society OR B-375/385, eleven discs, $52.89); Artur Schnabel (Saraphim 1D-6065 and 1C 6064/6067, sixteen discs in five albums, one of variations and miscellaneous pieces, $47.68); Wilhelm Backhaus (London CSP-2, ten discs, $50); and, finally, Claude Frank (Victrola VICS-9000, twelve discs, $35.76). I have some comments to make about each of these sets.

The Badura-Skoda set I can pass over quickly, for I haven’t very much that is nice to say about it. I tend to hear in it the different takes of a performance even though I cannot hear the splices. The interpretations, for the most part, seem less interpretations than assemblages, patchings together of the right notes with little of an overall conception to support them. Occasionally, one hears a sonata for which the pianist has a special affection or affinity—but all too seldom. The tone is relatively percussive, the recording clear enough to bring out the worst elements, and I find the set one of the least attractive integral sets of the sonatas I have yet encountered.

The Claude Frank set is another matter. Frank, in spite of his experience and his teachers (he studied for a time with Schnabel), does not have a big reputation. In my opinion a completely satisfying Beethoven cycle is still beyond him, but there is no question that he makes a noble attempt. His performances, when they are bad, are simply superficial; there is just too much note spinning. And he has a relatively consistent habit, when he cannot provide the musical depth, power, or sustained excitement that a movement needs, of simply playing it fast. All the more surprising, then, that, quite in addition to his success with the lighter sonatas, he reaches one of his high points with his performance of the “Hammerklavier.” It may not go down as one of the great “Hammerklaviers” in the history of recorded music, but it is no mean accomplishment. I find Frank generally a little more freely; there are little expressive intensifications, but at the next, and only occasionally in those of the others, is the sense of a real encounter between music and interpretation. It is just so continuously evident that Schnabel, through intellect, intuition, labor, and experience, divined the musical point of every pianistic note, that listening to his Beethoven, even through clouded monophonic sound, is a continual revelation and pleasure—which is not to say that I or anyone else would automatically prefer his performance of a given sonata to another pianist’s. But it is strongly apparent that Schnabel’s interpretation is one that has been chosen after all the legitimate alternatives are known, and that sort of intellectual expertise I have heard from very few musicians in my life. I consider the Schnabel Beethoven set to be indispensable to a record library. I think I regard it in almost the same way I do the King James version of the Bible.

BACKHAUS, in his recording (all performances but that of the “Hammerklavier” are new; the artist died before he could make his previous rendition of that sonata), offers something that neither of the previous sets does: personality. Backhaus, of course, was a pianist of a much older school; he made his debut long before either Frank or Badura-Skoda was born. The difference is apparent immediately. The musical line breathes far more freely; there are little expressive moments, perhaps not as written in the music, but convincing in the context of performance; there is less attention to the letter of the score (though both Frank and Badura-Skoda present moments that are decidedly not what Beethoven wrote). But Backhaus’ Beethoven style was of a very specific sort, and one that is certainly not to everyone’s liking. It is a relatively soft-shouldered Beethoven, with a peasant gruffness under the sophisticated phrasing, but shying away from too great an incisiveness and tendency to make fast movements a little slower and slow movements a little faster. Magic, as one would want in some of the late sonatas, is virtually absent, and one is always conscious that this is very human playing. Of course, by the time he made these recordings Backhaus had lost something in sheer pianistic technique—but that is not the whole story. He was, very simply, a pianist who could be graceful at one moment and awkward at the next, and what is most bewildering about his Beethoven is that it was his Beethoven. London’s recording is somewhat variable, but the range is from good to really excellent.

COMING back to Schnabel after such varied adventures is both an exciting and a comforting thing. Yes, the F-sharp Sonata really is a marvelous piece, and the G Major, Op. 79, likewise, and there most certainly is magic in the Op. 111 Arietta. It is almost an unfair comparison. There are few, very few, pianists whose regular repertoire encompasses all the Beethoven sonatas. They play four or five regularly, another few occasionally, and to have them merely “work up” the rest for a recording project is not calculated to produce great performances. Schnabel, on the other hand, lived the sonatas, all of them. What resides in his performances, and only occasionally in those of the others, is the sense of a real encounter between music and interpretation. It is just so continuously evident that Schnabel, through intellect, intuition, labor, and experience, divined the musical point of every pianistic note, that listening to his Beethoven, even through clouded monophonic sound, is a continual revelation and pleasure—which is not to say that I or anyone else would automatically prefer his performance of a given sonata to another pianist’s. But it is strongly apparent that Schnabel’s interpretation is one that has been chosen after all the legitimate alternatives are known, and that sort of intellectual expertise I have heard from very few musicians in my life. I consider the Schnabel Beethoven set to be indispensable to a record library. I think I regard it in almost the same way I do the King James version of the Bible.

I have also received four sets of the complete Beethoven symphonies: Erich Leinsdorf and the Boston Symphony (RCA VICS-6903, $21.98); Hans Schmidt-Isserstedt and the Vienna Philharmonic (London CSP-1, three over-
Discs at almost the price of two if you buy very much. All but the Second Concerto I can well see that others might like it personal lack of enchantment with the set, elegantly straightforward. Despite my strikes me here as not academic but rather stein), and Leinsdorf’s accompaniments moments, though (as always with Rubin- charm the pants off everyone, and that is the album. A funny business, records. Two complete sets of the string quartets have also been included in my recent listening, one by the Guarneri Quartet (RCA VCS 11-100, eleven discs, $33.98), and one by the Melos Quartet of Stuttgart (Musical Heritage Society OR- D-386/97, twelve discs in three albums, $35.88). The latter set includes the Quartet in F, arranged by Beethoven from the Piano Sonata, Op. 14, No. 1. The Guar- neris, among them, can probably boast more sheer technical brilliance than any other quartet in the world today, and there is no lack of musicality in their work. However, there is a certain character- istic hardness to their playing which may not be to everyone’s taste or be equally congenial to all music. I find the group exceedingly good in the early quar- teis, even better in the middle quartets, and rather disappointing in the late works. My disappointment, though, is not shared by several of my colleagues. The Melos Quartet is a group new to me (they are not related to the Melos En- semble of London), and it has, apparently, been concertizing regularly for only a few years. I don’t think I have ever heard a more suave quartet. Their technique is ample rather than virtuosic (they come apart considerably more in the Grosse Fuge than the Guarneris do), but it is up to all but the most extreme demands made upon it. And Lord, what a lovely warm sheen there is to their playing, what grace, what comfortable elegance—and without the mannered quality that one finds in the superficially similar Quartetto Italiano. The Melos Quartet is accorded quite reasonable reproduction, and apart from one bit of sloppy production (the last few measures of the second move- ment of Op. 59, No. 1, which closes the first side of the disc, are repeated at the beginning of the third movement on the second side), this, in my opinion, one of the very best sets of the Beethoven Quartets on the market today.

I cannot get very excited about Ar- tur Rubinstein’s set of the five piano concertos, with Leinsdorf and the Boston Symphony (RCA VCS 6417, four discs, $12.98). Rubinstein, as always, is out to charm the pants off everyone, and that is not the sort of Beethoven I like. There is grace aplenty, but not much in the way of intellect, and the pianist gives the strange impression of continually accenting the wrong notes or beats. There are beautiful moments, though (as always with Rubin- stein), and Leinsdorf’s accompaniments strike me here as not academic but rather elegantly straightforward. Despite my personal lack of enchantment with the set, I can well see that others might like it very much. All but the Second Concerto have previously, so you get four concertos on four discs if you buy them singly, and five concertos on four discs at almost the price of two if you buy the album. A funny business, records.

Two complete sets of the string quar- teis have also been included in my recent listening, one by the Guarneri Quartet (RCA VCS 11-100, eleven discs, $33.98), and one by the Melos Quartet of Stuttgart (Musical Heritage Society OR- D-386/97, twelve discs in three albums, $35.88). The latter set includes the Quar- tet in F, arranged by Beethoven from the Piano Sonata, Op. 14, No. 1. The Guar- neris, among them, can probably boast more sheer technical brilliance than any other quartet in the world today, and there is no lack of musicality in their work. However, there is a certain character- istic hardness to their playing which may not be to everyone’s taste or be equally congenial to all music. I find the group exceedingly good in the early quar- teis, even better in the middle quartets, and rather disappointing in the late works. My disappointment, though, is not shared by several of my colleagues. The Melos Quartet is a group new to me (they are not related to the Melos En- semble of London), and it has, apparently, been concertizing regularly for only a few years. I don’t think I have ever heard a more suave quartet. Their technique is ample rather than virtuosic (they come apart considerably more in the Grosse Fuge than the Guarneris do), but it is up to all but the most extreme demands made upon it. And Lord, what a lovely warm sheen there is to their playing, what grace, what comfortable elegance—and without the mannered quality that one finds in the superficially similar Quartetto Italiano. The Melos Quartet is accorded quite reasonable reproduction, and apart from one bit of sloppy production (the last few measures of the second move- ment of Op. 59, No. 1, which closes the first side of the disc, are repeated at the beginning of the third movement on the second side), this, in my opinion, one of the very best sets of the Beethoven Quar- teis on the market today.

Finally, I have received from the Ar- tur Toscanini Society (P.O. Box 1746, Amarillo, Texas 79105) a nine-record set (ATS 1016-1024) which contains six symphonies, the Missa Solemnis, the Triple Concerto, the Piano Concerto No. 3, the Choral Fantasy, and other shorter works. Recordings of the Society are not on sale to the general public but are sent to all members. Interested parties should write to the above address. I confess to being somewhat half-hearted, myself, in my admiration for the late Italian maes- tro, but I must point out to those who feel similarly that the performance of the Third Concerto by Myra Hess in this set is an altogether splendid example of the musical genius of that lady. Toscanini lovers will find much else to admire. So concludes a brief rundown of some 113 records brought into this world by Beethoven’s two-hundredth birthday.
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THE BYRDS: (Untitiled). The Byrds (vocals and instrumentals). Take a Whiff; All Things; Yesterday's Train; Hungry Planet; Eight Miles High; and eleven others. COLUMBIA G 50127 two discs $5.98.

Performance: Good
Recording: Good

This one is a nostalgic trip back with one of the earlier California groups. The best thing here is a "live"-performance set in which the Byrds give some of their early hits, such as Mr. Tambourine Man (was that the first of the drug-message songs?) and Positively 4th Street the once-over. The second side of that record features a sixteen-minute Eight Miles High which is very good indeed, and is helped a great deal by an enthusiastic audience. The other record is all studio stuff and shows that the Byrds melted at an alarming rate—they just don't sound very interested. As a consequence, neither was I. It did set me to wondering about something, though: is there anything more ephemeral than a rock group? (I know, I know—the people who write about them). P.R.

MERRY CLAYTON: Gimme Shelter. Merry Clayton (vocals); instrumental accompaniment, Gene Page, arr. Country Road; Tell All the People; Bridge over Troubled Water; Gimme Shelter; I've Got Life; Here Come Those Heartaches Again; and four others. ODE SP 77001 $4.98, © 77001 $6.98, © 77001 $6.98.

Performance: Loud
Recording: Good

Merry Clayton is one of the many bastard musical children of Aretha Franklin. Miss Clayton shouts and stumps and flays the smoky air (of the isolation booth) with her expressive arms. She would be a knockout at a Baptist revival or in a rock version of Elmer Gantry. But on records, she is too much for my speakers. She is fondness for Aretha Franklin either, but if we've gotta have one hysterical on our hands, we certainly don't need any second-rate imitators. R.R.

FAIRPORT CONVENTION: Full House. Fairport Convention (vocals and instrumentals). Walk Awhile; Dirty Linen; Sloth; Sir Patrick Spens; Flatback Caper; and two others. A & M SP 4265 $4.98.

Performance: More English folk-rock
Recording: Very good

Fairport Convention had the original hit on an extremely popular tune from a few years back called Who Knows Where the Time Goes. Well, it isn't only time that has gone, since vocalist Sandy Denny, composer of the song, has left the group, taking with her (to Fotheringham) much of its special appeal. What remains is a highly polished English folk-rock group whose style traces to a spot somewhere between the Incredible String Band and the Pentangle. Like Pentangle, Fairport is particularly fond of starting with traditional English songs and literally electrifying them with modern instruments and complex rhythms, and, like the Incredible String Band, Fairport retains a sense of humor and an awareness that the music, after all, is from another time and place.

I like the group in small doses. Overexposure to Dave Swarbrick's fiddle playing, adept though he may be, recalls unpleasant memories of country hoedowns. But when the group moves into the more mystical English folk material, they can be undeniably appealing. I suppose it simply comes down to the fact that Fairport Convention hasn't found an adequate musical replacement for the gifted Miss Denny. D.H.

EXPLANATION OF SYMBOLS:

® = reel-to-reel tape
© = four-track cartridge
® = eight-track cartridge
© = cassette

Monophonic recordings are indicated by the symbol ®; all others are stereo.
This is an examination of "the tragic failures of the American social system" from the author of Abraham, Martin and John, a song which Mahalia Jackson was able to make into a three act soap-opera not long ago. I had always been under the impression that Mahalia had gotten the song from the estate of Fannie Hurst, but then I don't keep up on these things. Dick Holler does keep up on things and he'll tell you just how bad things are at the drop of a slogan.

P.R.

RECORDING OF SPECIAL MERIT

JEFFERSON AIRPLANE: The Worst of

The album's theme seems to be an extension of ideas in Wooden Ships, the song by Crosby and Stephen Stills (recorded by the Airplane) about sailing off in nonradioactive wooden vessels after the holocaust. Here the fantasy is that several thousand crazies, convinced "Americana" despises them, blast off in a hijacked starship, "reaching for tomorrow."

The intricate vocal blendings that make both Grace and Paul so important to the Airplane and the sheer brilliance of the musicians playing the instruments carry the Starship along nicely. Don't look for any outstanding songs here; do look for a whole album of solid music.

N.C.

THE KINKS: Lola Versus Powerman and the Moneygoround. The Kinks (vocals and instrumental). The Contenders; Denmark Street; Get Back in Line; Rats; Apeeman; Powerman; and seven others. REPRISE RS 6423 $4.98, @ B 6423 $6.95, @ M 86423 $6.95, @ M 56423 $5.95.

Performance: Assured

Recording: Very good

A corrosively bitter tone is common to almost every song in this album, whether the subject be pop fame (as in Top of the Pops—"It's strange how people want you when your record's high/Con when it drops down just pass you by."), the shady business dealings of managers (The Moneygoround—"But if I ever get my money I'll be too old and grey to spend it"), or the mysterious Powerman—"He's got my money and my publishing rights." So much of the content is devoted to disillusionment with fame, money, and success that listening to the album is like reading one of those Hollywood novels, something written, in his later

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CIRCLE NO. 6 ON READER SERVICE CARD
years, by a one-book novelist on his estate in
untaxed Switzerland (purchased with his twen-
ty-year Hollywood paychecks as a screen writ-
er) about the cruelty and venality of Holly-
wood life at the top. It is a very American com-
plaint, and it sounds just as phony and self-pity-
ing a view as ever, even when it issues from the
English pop world.

Most of the indignation seems to center
around the fact that you can’t have it both
ways, i.e., money-fame-success and artistic self-
respect. It can happen, but generally to the
great innovators, such as the Beatles, or Picas-
so, or Hemingway. They are people of great
courage or of strong artistic conviction who
would never be content to mine the vein of
gold that runs through the pop entertainment
world. Therefore, the Shavian (Irwin) indigna-
tion of those who have conscientiously extract-
ed the ore seems like just crocodile tears.

I hope the Kinks have gotten all this Mr.-
Bright-Lights-Asks-What-It’s-All-About bunk
out of their system with this album and will go
back to being the intelligent, perceptive, and
highly entertaining group that they have al-
ways been.

P. R.

LED ZEPPLIN: Led Zeppelin III. Led Zepp-
lin (vocals and instrumentals). Immigrant
Song; Friends; Celebration Day; Since I’ve
Been Loving You; Out on the Tiles; and five
Songs; Friends; Celebration Day; Since I’ve
been Loving You; Out on the Tiles; and five

It took Led Zeppelin no more than three or four
weeks to hit the top of the pop charts with
their third, and latest, outing. The record may
still be cresting by the time you read this re-
view. The formula is familiar enough: whip up
a batch of miscellaneous blues fragments; blend
with high-decibel electronic amplification
and distortion; add an undercurrent of
heavy bass; top with nasal vocals by Robert
Plant and slippery-slidey guitar playing by Jim-
my Page.

And it works—commercially, that is. That
results in dull music is less important than the
fact that Led Zeppelin is good theater, as all suc-
cessful rock almost has to be. The group has
toured widely, and the image of Plant singing
ecclesiastically, whipping his long, curly blond
locks around his head, is a picture that has
been indelibly recorded in the minds and
hearts of countless teeny- (and some not so re-
ny-) hoppers.

To my ears the group is a bummer. Like
Grand Funk Railroad, Led Zeppelin is a symbol
of the unremittingly adolescent qualities which
are always active in popular music. If that’s
where your head is at, then groovy. I’d rather
listen to those singing whales.

P. R.

JOHN LENNON: Plastic Ono Band. John
Lennon (vocals, guitar, piano); Ringo Starr
(drums); Klaus Voorman (bass). Mother; Hold
On John; I Found Out; Working Class Hero;
Look at Me; My Mummy’s Dead. APPLE
SW3372 $4.98, ® 4XW3372 $6.98. © 8XW
$6.98.

Performance: Very good
Recording: Good

John easily wins the first round in the Solo Al-
bums by Former Beatles competition, as I see
it, and yet this record is almost as disappointing
in some ways as the first post-Beatles stabs by
Paul McCartney and George Harrison. The
thing that bothers me most is the general
theme that runs through most of the lyrics—
about how it’s John and Yoko against the cold,
ininsensitive world. If he’s been quoted correct-
ly, John has of late set himself up as the icono-
clast who will blast the legend of the Beatles to
shremithereens. That’s all right, but consider that
at the same time he’s doing a job that seven PR
men with three ditto machines each couldn’t

It’s anything but standard.
They are the hip cats who still prowl through their music is svelte, chic, soigné, and sensual.

Of the Sunrise; Stillness. A & M SP 4284

Arrs. Stillness; Righteous Life; Chelsea Morn-

McPhatter.

The next album will show us a less uptight feel. He has a more current

McPhatter (vocals); orchestra. I'll Be-

CLYDE McPHATTER: Welcome Home.

RECORDING OF SPECIAL MERIT

N.C.

Sergio Mendes & Brasil '66, could take Stephen Sills' song For What It's Worth and make it sound amusingly like Hernandez's Hideaway (from the Broadway musical The Pajama Game).

With this new album, Sergio Mendes and Bra-

til '66 become the radical chic of the music world. Not that the group ignores the tradition-according to the master Sergio himself singing:

The title of the album is taken from a lovely song by Paula Stone; it is haunting. It's the first band and the last on the album, and what comes in between is either as quiet and poi-
gnant as a walk in the spring rain or as rum-

spiced and bouncy as a memory of pre-Castro Havana. I passed on the last two Mendes al-

bums because they were getting repetitious.

The musical jungle on little cat-paws of bossa-

How though good, should have been better, but

NOPE, I don't dig Savoy Brown. They have

PETENT of the imitative English blues-rock

generally impressed me as one of the less com-

odette, the most luminous folksinger of them all, singing their theme songs, oh, what glorious uprisings we would have! I mean, have you ever thought of doing the rhumba to the New York Urban Coalition League's theme song, Give a Damn? ‘If you take the train with me/Uptown through the misery/Of ghetto streets in morn-

light/They’re always night’—cha, cha, cha! I'm not being facetious. I'm as dead seri-

ously as I know Odette must be. She also takes white composers' songs and makes them black

right down to their souls. James Taylor, Paul McCartney, Mick Jagger, Randy New-
man, and Elton John. . . . Believe me, the col-

or change is most flattering to these talented

odette. She only spuns into earshot in 1956, has always

sings it, however). And she teases the whine

Exhibited as her problems as a writer; it has a

of arranging it). Northbound Train is a good

ntional Brazilian love song, no, no—two lovely

Cancao Do Nosso Amor and Viramundo.

end side one with the master Sergio himself

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spiced and bouncy as a memory of pre-Castro Havana. I passed on the last two Mendes al-

bums because they were getting repetitious.

this? 

though good, should have been better, but

some chauvinistic lyrics in Hold On John, What you're away

meant to re-introduce him, since, as the notes

for the past three years, and this album is

and seven others. DECCA DL 75231 $4.98.

Performance: Good

Recording: Recording: Good

Clyde McPhatter has been working in Europe for the past three years, and this album is

meant to re-introduce him, since, as the notes

so accurately point out, "When you're away three years from this scene . . . it's like thirty

years." I wish that the news could be a little

more positive, but McPhatter seems to have

lost some of the brio and guts that I used to

enjoy in his work. True, he has a more current-

ly fashionable soul sound, but his delivery

seems fuzzy and unhatched. Anyone Can Tell is the only track that caught fire for me. More

of the next album will show us a less uptight

McPhatter.

P.R.

RECORDING OF SPECIAL MERIT

SERGIO MENDES & BRASIL '66: Stillness. Sergio Mendes & Brasil '66 (vocals and instru-
mestals); Dick Hazard and Thomas W. Scott arrs. Stillness; Richlighte Life; Chelsea Morn-
ings; Cancao Do Nossos Amor (Far Away To-
day); Viramundo; Lost in Paradise; For What
It's Worth; Sometimes in Winter; Celebration
of the Sunrise; Stillness. A & M SP 4284
$4.98, @ 4284 $6.98, @ 4284 $6.98.

Performance: Radically chic

Recording: Very good

Their music is wizelle, chic, soigné, and sensual.

and the voice of blues pieces than of anything else—which voice always sounds more natural than
tunes. Nevertheless, this is a better recording than his first, with generally better songs, and Murphy

shows more maturity as a performer. As a

songwriter, he sometimes seems on the point

of exploding in a fit of talent big enough to

upset the balance of payments or something,

but he never quite does it. He comes closest

with the title song (but does an even better job of arranging it). Northbound Train is a good

illustration of his problems as a writer; it has a
good, driving rock melody but it has some cli-

che-bogged lyrics about feeling like Easy Rider

in a one-house town who is "join' where no one

will care how I wear my hair."

Well, it isn't the greatest of records, but

Murphy is coming along nicely. It makes you

feel his next one will be much better. N. C.

RECORDING OF SPECIAL MERIT

ODETTA: Sings Paul McCartney, Randy Newman, James Taylor, Elton John, Keith Richard, Mick Jagger, Don Cooper, John Buc野生, Bertie Tung, and Odette. Odette (vocals); orchestra; Odette and Elton John arr. Take Me to the Pilot; Mama Told Me Not to Come; Every Night; Hit or Miss; Give a Damn; My God and I; Lo and Behold; Bless the Children, No Expectations; Movin’ It On. POLYDOR 24 4948 $4.98.

Performance: Superlative Odette

Recording: Good

If someone could pass a law that all move-

ments, protest, revolutions, minority groups, and

warring lovers had to have Odette, the most luminous folksinger of them all, singing their theme songs, oh, what glorious uprisings we would have! I mean, have you ever thought of doing the rhumba to the New York Urban Coalition League's theme song, Give a Damn? "If you take the train with me/Uptown through the misery/Of ghetto streets in morn-

light/They're always night'—cha, cha, cha! I'm not being facetious. I'm as dead seri-

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end side one with the master Sergio himself

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ording, and I still think he's a better singer of

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will care how I wear my hair."

Well, it isn't the greatest of records, but

Murphy is coming along nicely. It makes you

feel his next one will be much better. N. C.

RECORDING OF SPECIAL MERIT

SAVOY BROWN: Looking In. Savoy Brown (vocals and instruments). Gypsy; Poor Girl; Money Can't Save Your Soul; Sun-
day Night: Looking In; and four others. PAR-
ROT PAS 71042 $4.98.

Performance: Lame English blues/rock

Recording: Very good

Nope, I don't dig Savoy Brown. They have

generally impressed me as one of the less com-

petent of the imitative English blues-rock

(Continued on page 96)
The new KLH Thirty-Two is the best speaker you can buy for the money.

Bravado has never been our bag. But after carefully comparing the new model Thirty-Two with our competitor’s best-selling loudspeaker, we’re going to break our rule.

Our product is superior.
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But the Thirty-Two not only sounds like an expensive speaker, it looks like one, too. It is unquestionably the best looking loudspeaker in its price range.

The price?
Almost as amazing as the sound. Just $47.50 ($55 the pair).†

Make sure you hear—and see—the new KLH Thirty-Two soon. And compare it with the best-known speaker in its price range. We are sure you will agree that there's never been anything like it for the money.

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For more information on the Model Thirty-Two, write to KLH Research and Development Corporation, 30 Cross St., Cambridge, Mass. 02139. Or visit your KLH dealer.
groups, and nothing occurs in this new release to change my mind. That there was managed to survive this long in the maelstrom of the pop business is a wonder to me, but I really should know better. Lame English blues bands always do well here, especially if they keep the tunes simple and the dialect funny (and the bass loud). Given those requisites, Savvy Brown will probably be around for years.

A. H.

RECORDING OF SPECIAL MERIT

KATHLEEN SMITH: Kathy Smith. Kathleen Smith (vocals); instrumental accompaniment, Bill Shepard arr. Topanga; What Nancy Knows; A Vision of Two Saints; End of World; Same Old Lady; Blackbird and the Pearl; Russian Gemini II; If I Could Touch You; Circles of Love. Storystory SPS 6003 $4.98.

Performance: Fascinating folk-pop
Recording: Very good

Once upon a time, Kathy Smith would have been called a folk singer. Now this charming balladeer is able to create and tell the music of today. Just as Judy Collins bridged that musical generation gap from straight-folk to "pop" singer, so now Kathy steps right across it. No longer do these ladies (and gentlemen) tune up their trusty guitars and winsomely walk about John Riley. Like Miss Smith, today's folk-pop artists are more likely to be singing their own music, which, in Kathy's case, is lyrically and romantically excellent. Surrounding Kathy's charming, strong, and reflective voice are extremely talented musicians like Jeremy Steig on flute, Monte Dunn on lead guitar, Jim Fielder and Chuck Ramsey on bass, and Bill La Vorgna on drums, among others.

The album has its own particular and unusual style—a kind of neo-Classicism, with a preference for small instrumental groups used in the concerto style, one instrument taking the part of the concertin against the ripieno of five or six instruments. I've just laid some very heavy responsibilities on this young lady's frail shoulders, and I don't mean to make her sound dull and doddish or inside and coltish. On the contrary, for all of the classical roots the group has, it still has a very sensual rock beat that can be used not only to create an impact like an air hammer. Every sound seems to be telling you something—no longueurs, no breathtaking moments. There are no shadows, no needed pacing. There are no shadows, no needed pacing. There are no shadows, no needed pacing. There are no shadows, no needed pacing. There are no shadows, no needed pacing.
AUTOMATIC REVERSE STEREO CASSETTE DECK

Exciting stereo quality, custom engineering, attractive design—and "INVERT-O-MATIC"—the automatic reversing system that plays and records both sides of the cassette automatically for up to two hours of uninterrupted listening pleasure.

ROBERTS 150D
High Frequency Response, 30-14,000 Hz ±3 dB • Signal-to-Noise, better than 45 dB • Automatic Stop/Automatic Shut-off • Push-button Control Panel • Pause Control • Slide-pot Tone & Volume Controls • Cassette Eject Button • Two VU Meters • Index Counter w/Reset Button • Price: $229.95
Superlatives seem to come as easily in describing this winning duo as the two of them seem able to make albums. The tone of this current gathering is typical Turner turn-on, guaranteed to keep you moving, and if you've been lucky enough to see Tina doing her thing in person—well—what can I say, except she has to be seen to be believed and appreciated. But Tina's a star even when audio is her only medium. She's the fastest, least inhibited, and most passionate performer of soul-rock-blues this side of camp. She sexily soul-screams her lyrics with all the flickeness of a truly liberated woman. And it's side two that deserves the most, with all the fickleness of a truly liberated woman. She's the fastest, least inhibited, and most passionate performer of soul-rock-blues this side of camp. She sexily soul-screams her lyrics with all the flickeness of a truly liberated woman. And it's side two that deserves the most.

NANCY WILSON: Now I'm a Woman, Nancy Wilson (vocals); orchestra, Bobby Martin, Thom Bell, and Lenny Pakula arr. and cond. Now I'm a Woman; Joe; (They Long to Be) Close to You; Make It with You; The Real Me; and five others. CAPITOL ST 541 $4.98, ® M 541 $6.98, ® 8XT 541 $6.98, ® 4XT 541 $6.98.

Recording: Another Wilson for the collection; Recording: Okay

I don't know why Nancy Wilson felt the need to title her new release "Now I'm a Woman." I never doubted it for a moment. It's hard to imagine sexy, loving Nancy as a little brat, even though there is a touched-up photo of Nancy as a child on the backside of the cover. But then Nancy's photos have adorned so many jackets by now that art directors must be frantic trying to find a new way to present her. Don't get me wrong. I love Nancy Wilson and I look forward to each new photograph with the same anticipation as a skittish shooter waiting for the next clay pigeon. But I do have a suggestion. Next time all those heads of departments have to pow-pow over Miss Wilson's album design, why doesn't someone suggest that fabulous photographer Skreberski who loves to picture elegant ladies nude?

Let's attend to Miss Wilson's main vocation, music. She hasn't failed us. She's as good as ever. That is, if you like last year's hits warmed over. (They Long to Be) Close To You, The Long and Winding Road, and Bridge Over Troubled Water are all nice songs, but I am sick of them. So once more, I'm forced to take refuge in the less-known selections of side two. Let's Fall in Love All Over Again is a wildy gushy old-fashioned love song, and I'm wild about it. Make It with You is my favorite and for me the flirt song of the year. Next time I wish she'd try How Little We Know. With that song and the Skrebneski photograph Nancy could make 1971 a very happy year. R.R.
As in Zabriskie Point, the score is supplied by a variety of rock groups, but while in Am-
nioni's film the music is overheard rather than heard—"an ironical background commentary—
the music here is aggressively 'relevant' and intewoven with the scenes as elaborately as the
restless and over-ingenious 'with-it' pho-
tography that is making it impossible to
notice the difference these days between a feature film
and a TV commercial. MGM, whose young
president, Mike Curb, is notoriously eager to
keep his company young, provides two full
discs of the stuff, with Buffy Sainte-Marie giv-
ing her all to the key title song, The Circle
Game, and Crosby, Stills, Nash and Young on
hand together and separately for long, long
workouts of songs like Down by the River
and The Loner. These offer humorously macabre
comments on the action, and moments of bu-
colic escape from it, as when the Red Moun-
tain Jug Band does Fishin' Blues. Since MGM
owns the rights to it, perhaps, the introductory
measures of Strauss' Also Sprach Zarathustra
are dragged in (an encore for 2001), and pas-
sages from Marcello's Concerto in D Minor
provide an affecting interlude in a record store
for the lovers in the movie. I'm inclined to sus-
pect that one record of all this might just have
been enough.

P. K.

TWO BY TWO (Rodgers - Charnin).
Original-cast recording. Danny Kaye, Walter
Willison, Madeline Kahn, Marilyn Cooper (vo-
cals); orchestra, Jay Blackton cond. COLUMBIA
S 30338 $5.98, 0 SR 30338 $9.98, © SA
30338 $6.98, © ST 30338 $6.98.

Performance: Bravura

Recording: Excellent

Oscar Strauss wrote one of the immortal melo-
dies of this century when he was well past
eighty—for the film La Ronde. I have no idea
how old Richard Rodgers is (probably youn-
ger than he looks)—those annual tributes from
Ed Sullivan can take their toll, but he too has
written one of the loveliest songs of his career
for Two By Two. Since it is among Rodgers'
best, it automatically becomes an adornment of
the American musical theater. It is called I Do
Not Know a Day I Did Not Love You; it
is sung at the beginning of side two of this disc
by Walter Willison, and reprised a little later
by him and Tricia O'Neil. It is one of those
magical waltz-like ballads, starting on a simple
chord, that Rodgers has made so extraordinarily
and uniquely his own. For approximately
five minutes or so, during the playing of these
two bands, one feels the magnificence of
Rodgers' talent, and is reminded that he is one
of the geniuses of the golden age of American
musical comedy. And since musical comedy is
one of only two arts that America can lay claim
to originating (the other is film), I can't imagi-
...
BESSIE SMITH was at last coming into her own. Her grave in the Mount Lawn Cemetery at Sharon Hill, Pennsylvania, unmarked since her death in 1937, has finally received a headstone, thanks to the late Janis Joplin and a Philadelphia nurse, Juanita Green. More importantly, for an appreciation of what she meant to American music, Columbia is reissuing all the 160 records surviving from the 180 she made for them between 1923 and 1933.

Not that CBS has hitherto been remiss in its stewardship of the Bessie Smith legacy. They continued to record her in the late Twenties when sales of her records were declining. John Hammond brought her back from premature obscurity in 1933 to make four sides for the British market. And in 1951 CBS issued an admirable four-volume set, "The Bessie Smith Story," comprising a representative cross-section of her art and her recording career.

The new project will offer ten discs, to be released in five volumes, each priced at $3.98, and arranged sequentially in such a way as to permit the entire series to be played through chronologically with only one turnover at the conclusion of ten sides. Thus, the first volume of the series to be released gives us the first sixteen and the last sixteen of Bessie's records. "Any Woman's Blues," the second volume, also just released, contains her second sixteen and next-to-last sixteen recordings.

Volume one of the series is titled "Bessie Smith, the World's Greatest Blues Singer," and there can be few who will quarrel with that. She is more familiarly remembered as the Empress of the Blues, and she was an empress, all right, imperial and imperious in her singing, in her appearance, in her demeanor—and in her cups. As is true of all great rulers, she not only dominated her own time, but also influenced decisively the times that came after her. So much that we treasure in American music either stems from her or was illuminated by her genius.

Louis Armstrong, Mildred Bailey, Billie Holiday, Ethel Waters, Mahalia Jackson, Jack Teagarden, and many more—they all heard her or heard her records, and they never forgot what they heard. And she was not inspiring and influent W.C. Handy, only star of whose Black Swan Label was Ethel Waters. To Northern ears Bessie sounded too crude. Her behavior was pretty crude, too. One story has it that she disgusted Pace when she held up a take, saying: "I don't think you can sing worth a dime—and you know you sure as hell can't sing worth a dime!" Bessie came north in 1920, worked for a time in Atlantic City, and later settled in Philadelphia. She wasn't the first black singer to record. Mamie Smith (no relation) was the first, with Perry Bradford's That Thing Called Love and You Can't Keep a Good Man Down for Okeh in February, 1920. The enormous sale of her Crazy Blues shortly afterwards revealed the existence of a black market for songs. "Race records," as they came to be called, were already a prospering industry when Bessie came along, and she had a hard time breaking in. She auditioned several times, and was turned down even by Harry Pace, an early black entrepreneur and partner of W.C. Handy, the star of whose Black Swan Label was Ethel Waters. To Northern ears Bessie sounded too crude. Her behavior was pretty crude, too. One story has it that she disgusted Pace when she held up a take, exclaiming, "Hold on, let me spit!"—and spat! Her break came when Frank Walker took over race records at Columbia. His first directive to pianist Clarence Williams, already installed as Judge of Race Records, was to get that Bessie Smith he had heard six years earlier, the star of whose Black Swan Label was Ethel Waters. To Northern ears Bessie sounded too crude. Her behavior was pretty crude, too. One story has it that she disgusted Pace when she held up a take, exclaiming, "Hold on, let me spit!"—and spat! 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man, Jack Gee, and set up housekeeping at 1226 Webster Street. Down Hearted Blues included the line: "Got the world in a jug, the stopper in my hand." And that's about how it was. In the next six years Bessie's records sold somewhat more than ten million copies, and she toured the country as one of the highest-paid stars of the black entertainment world. There was just one flaw in the picture. The world in her jug was spelled G-I-N. As George Avakian put it, wryly, in his liner notes for the 1951 release, "she drank to excess in her youth and increased her capacity as she rose to fame." Standing 5'9" and weighing in at 210 pounds, she was a formidable drunk.

Those who heard Bessie Smith in her prime have their memories, and those memories are vivid. She was obviously a tremendous performer. For the rest of us there are only these records. They tell us little about the way she lived before a live audience, but a great deal about what she sang and how they tell us a lot, too, about the singers who came after her. And they raise some pertinent questions. The most fundamental of these is how to reconcile what we hear with the image of Bessie by Ethel Waters and others as a "shouter," for there is nothing on any record she ever made that sounds like shouting. Indeed, she seems, on the recorded evidence, to have been incapable of making a strident or otherwise undisciplined sound. Her contemporaries made many. Bessie's tone is always rich and full and round and warm. The placement is wonderfully forward, and the production is natural, easy, and fluent.

The explanation lies, I suspect, in the fact that what we hear rarely sounds like singing, either, in any conventional or traditional sense of the term. It is more like an ultimately lyrical kind of speech, and very pretty, forceful, and forthright, as would be required of one accustomed to addressing large congregations before the days of amplification. Her breath was heavy on the vocal cords. The refinements of her vocal art—and there were many—were not dynamic. They were rhythmic and percussive. And when Bessie's voice ranged from top to bottom they called upon a limitless variety of pitch, color, emphasis, and rubato.

Compared with the great black singers of a later time, she was handicapped by an astonishingly short vocal compass. This may well be why she was at her best in custom-made or otherwise limited roles. Her approach to diction, or enunciation, was all of a piece with her approach to melody and rhythm. She was always a talker—or moaner—and as such she took pains to make herself understood. The vocabulary may be strange, even incomprehensible, at times, to those who don't sing the blues in that way. But the uninitiated, the uninformed, the uninitiated may be usual. At the same time it is free. Like Mahalia Jackson, she had no inhibitions about changing vowels to suit the melodic context. She added syllables and left syllables out, added or repeated a word here and there, and so on. Unlike the classical singer, she sang on and through the consonants, as the best popular singers, both black and white, have done ever since.

Appreciating her on records has its problems. Played one after another, the tracks may seem almost identical in melodic substance and delivery, one blues sounding very like another. But so, also, to the uninhibited and the inattentive, do Bach's fugues. As with the fugues, it is better to take Bessie Smith's tracks by the score; get each one over and over again, first memorizing the words, then concentrating on one specific aspect of the performance: the pattern of the pitches, the rubato, the embellishments, the slurs, the ornamentation, the rubato, the instrumentalists, and so forth. To play any side right through, one track after another, except as an initial reconnaissance of the terrain, is no way of getting to know Bessie Smith.

The new Columbia series is ideally suited to this kind of concentrated listening. It's all mono, of course, and the earlier records are acoustic, but Larry Hiller's engineering is superb. Surface noise has been almost totally eliminated. There is something more fundamental than any of those factors. A clue to Bessie's "shouting." The term, as used it, did not mean what is normally understood when any of us talks about another person's "shouting." As Bessie's black contemporaries used it, "shouting" was associated with a category of performer, and in their eyes it was a low one. Bessie Smith was a primitive, both as a person and a performer. She came north in the Twenties, had brought out the greatness in Armstrong and Sidney Bechet, it was a beat one of her own. Only one of her later sides, perhaps, is as good; scores of sessions for Columbia did she use drums, and in the theater she insisted on the drummer's restricting himself to brushes. She did not, apparently, want to be dominated rhythmically by any drummer.

And it should be remembered that jazz drummers in those days were less sophisticated, less swing-conscious than now. There was no reference here to Bessie Smith specifically, of course; there was the Depression and the fact that Bessie was never a radio artist and never played what her black colleagues called "white time." But there was something more fundamental than any of the above. What there was, it may be, a clue to the way blues singers we have been accustomed to hearing was a source of much pleasure to local music lovers. She interpretation of blues singing was, indeed, refreshing.

The finest of the late records on this new issue is Lonesome Road, dating from June 11, 1931. Here you have the old Bessie singing: "You can't trust nobody. You might as well leave me alone." Only a few hundred copies were pressed.

She knew what she was singing about. She was alone—she who, in 1925, had sung so exuberantly: "I ain't gonna play no second fiddle, I'm used to playing lead!" Her partner on that recording was Louis Armstrong. Bessie SMITH: The World's Greatest Blues Singer. Bessie Smith (vocals), Clarence Williams (piano), Fletcher Henderson (piano), and other accompanists. Down Hearted Blues; Baby Won't You Please Come Home; Nobody in Town Can Bake a Sweet Jelly Roll Like Mine; Moan, You Mourners; Need a Little Sugar in My Bowl; and twenty-seven others. COLUMBIA G 30126 two discs $5.98.

Bessie Smith (vocals), Irving Johns (piano), Fletcher Henderson (piano), and other accompanists. Down Hearted Blues; Baby Won't You Please Come Home; Nobody in Town Can Bake a Sweet Jelly Roll Like Mine; Moan, You Mourners; Need a Little Sugar in My Bowl; and twenty-seven others. COLUMBIA G 30126 two discs $5.98.
RECORDING OF SPECIAL MERIT

BELLINI: Norma: Oh! 'Rimembranza; Oh, non tremare; Dedi! con te; Mira, a Norma; Si, fino all'ore estreme. ROSSINI: Semiramide: Mitrane; . . . Serauni ognor si fido; No! no ti lascio; Ebben . . . a te; Ferisci . . . Giorno d'oronte; Joan Sutherland (soprano); London Symphony Orchestra, Richard Bonynge cond. LONDON © 31171 $7.95.

Performance: Bellissima
Recording: Excellent
Playing Time: 57'40"

Norma takes place in pre-Christian Gaul and has to do with a love triangle involving a Druid priestess, a Roman proconsul, and a temple virgin. In the end, the unchaste priestess and the proconsul who once rejected her climb up onto a funeral pyre for a blazing finale. But it isn't to see old Gaul that the customers come the proconsul who once rejected her climb up to Norma, there are rich and flamboyant duet passages in Rossini's most extravagant manner. Miss Horne and Miss Sutherland make the most of them, and those dazzling passages familiar from the overture provide stunning accompaniments. The sound is top-drawer Amperex, but if you want to know anything about the operas beyond what I've just told, you'll have to turn to the encyclopedias. Nothing ac-

As for Semiramide, it too tells a silly tale—this time about a Babylonian princess who led a violent and melodramatic life around 800 B.C. All that usually is performed today is its relatively terse and forceful "Sturm und Drang" piece, and really daring for its time — a re; Ferisci . . .

DEUTSCHE GRAMMOPHON EUGEN JOCHUM 0 923123


Performance: Forceful, dramatic
Recording: Good
Playing Time: 47' 

As of this writing, the 1966 Eugen Jochum recording of the Bruckner First Symphony is the only version listed in the Schwan and Harrison catalogs, though it will probably not be long before the Bernard Haitink-Amsterdam Concertgebouw performance on Philips becomes available.

The Bruckner First is no gigantic "cathedral" piece, but rather a relatively terse and forceful "Sturm und Drang" piece, and really daring for its time—1866, a decade before Brahms' First Symphony had its premiere.

Jochum, as is his wont, stresses the sharp contrasts between lyrical and dramatic elements in both dynamics and tempo, and the performance as a whole is a fine and spirited one. The recorded sound is excellent, the tape hiss at a tolerable minimum.

D.H.

DUKAS: The Sorcerer's Apprentice (see ROSSINI-RESPIGHI)

LISZT: Hungarian Rhapsodies: Nos. 2, 4, 5; Hungarian Fantasia for Piano and Orchestra. Shura Cherkassky (piano); Berlin Philharmonic, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON © 3300022 $6.98.

Performance: Glittery
Recording: Good
Playing Time: 53'40"

The original tapings of these performances were done in 1961 (Rhapsody No. 3, Hungarian Fantasia) and 1968 (Rhapsodies Nos. 2 and 4), and have appeared in various combinations on both disc and cassette. The veteran pianist Shura Cherkassky brings a fine, airy glitter to the solo part of the Hungarian Fantasia, and Karajan throughout strives with notable success to bring out the color and folkish freshness of this and the all-too-familiar Second Rhapsody. Musically, the most interesting piece in this package is the Rhapsody No. 5, a somber and highly effective "Heroic Elegy." The orchestral performance is splendid, and the sound is good.

D.H.

ROSSINI: Semiramide—excerpts (see BEL-LINI)


Performance: Tasty musical snacks
Recording: Excellent
Playing Time: 49' 20"

Profundities were not Rossini's long suite, but wit and melody were. Throughout his life, when he wasn't baking ambitious operas, he cooked up dozens of tiny musical hors-d'oeuvres. In fact, he called one of them "Radishes, Anchovies, Pickles and Butter Themes in Variations." During World War I, Sergei Diaghilev ran across a volume of these delicious trifles (together called Pechés de Vieil-lease, "Sins of Old Age"), and asked Ottorino Respighi to put them together into a ballet score. The result was La Boutique fantasque, and the choreography by Massine is all about a toy shop in which the toys turn on the customers when they find out they are going to be sold. Respighi's sparkling score, a singularly light-handed effort for so heavy an orchestra-

STEREO REVIEW
THE INK SPOTS: The Best of the Ink Spots. The Ink Spots (vocals and instrumentals). If I Didn't Care; My Prayer; Whispering Grass; It's Funny to Everyone but Me; We'll Meet Again; To Each His Own; Do I Worry? Address Unknown; Someone's Rocking My Dream Boat; Street of Dreams; Until the Real Thing Comes Along; and thirteen others. DECCA @ $7-1010 $9.95.

Performance: Black lavender Recording: Good transfer job Playing Time: 73’36”

It's more than a quarter of a century since the bland Ink Spot 'sound' began to invade the American airwaves, and for many years it seemed to us who were growing old with them that this quartet would be with us always. The first Ink Spots were Bill Kenny, Charlie Fuqua, Ivory Watson, and Orville 'Hoppy' Jones. (Later Watson and Jones were replaced by Bill Bowen and Herb Kenny.) At first they took what used to be known as a 'jive' approach to a tune, but then they invented the honeyed Harlem sound that made them famous in a record of If I Didn't Care, and

MELANIE: An American Pop

people started lining up at nightclubs and outside the old New York Paramount to bask in their glow. This cassette, which plays for nearly an hour and a quarter, seems to contain all the hits they ever sang: If I Didn’t Care, We Three, To Each His Own, Address Unknown, I Don’t Want to Set the World on Fire—a whole anthology of musical artifacts from the days when what came out of a jukebox was more likely to be dreamy, creamy, and smoo-oo-th than raucous, relentless, and relevant. The program offers perhaps more of the Ink Spots, therefore, than all but the most insatiable would be likely to hunger for at a single playing; after a while you begin to guess exactly where Charlie Fuqua's guitar will bring in the beat, when Bill Kenny (the one with the high voice) is going to come in for a falsetto riff, when "Hoppy" Jones (the one with the bass growl) will recite another of his "talking choruses." But the Ink Spots eventually became rather expert at kiddling their own predictable manner in stints like Java Jive and Please Take a Letter, Miss Brown, thus removing the wind from the sails of would-be parodists with disarming skill. In any case, here they are, with nary a shout or a shriek to break the tranquil spell, singing practically everything I can remember them doing. Except for an occasional residue of oldie needle-scratch, the dubbing is excellent. No notes.

P.K.

RECORDING OF SPECIAL MERIT

MELANIE: Candles in the Rain. Melanie (vocals; guitar); instrumental accompaniment. Candles in the Rain; Lay Down (Candles in the Rain); Carolina in My Mind; Cutest People; What Have They Done to My Song, Ma; Alexander Beetle; The Good Guys; Lovin' Baby Girl; Ruby Tuesday; Leftover Wine. BUDDAH @ X 5060 (33’$5.95.

Performance: Excellent Recording: Excellent Playing time: 38’24”

If you like Melanie, it's difficult for you to understand how anyone could feel otherwise, but people do seem to go to extremes on the subject. To me, she is about the closest we have come to producing an Edith Piaf, and even sounds a little like Piaf, especially in the French—What Have They Done to My Song, Ma? I know I can't reach you; Doctor, Doctor; Magic Bus; Someone's Coming; and four others. DECCA @ $7-5064 $6.95.

Performance: Oldies but goodies Recording: Poor Playing Time: 34’41”

Decca never cared much for the Who, the story goes, until Tommy started raking in the bread. It's difficult to believe such stories when you listen to cassettes like this. The disc version of "Magic Bus" came out late in 1968, before Tommy; I don't have one handy for sound comparisons, but this is one of the most diest-sounding cassettes I have ever heard. If the disc doesn't sound considerably better, it's a wonder anyone ever found out what the Who sounded like.

Musically, the album is good hard rock, sounding a bit dated, as any hard rock does these days, but offering a good sampling of the Who's work back in their guitar-breaking days. Such songs as Disguises, Dr. Jekyll & Mr. Hyde, and I Can't Reach You show the kind of songwriting talent that was to flower in Tommy—and the vocal and instrumental skills of Pete Townshend, Roger Daltry, and Keith Moon were established long before "Magic Bus" was produced. If you're a new Who fan, chuckling over their parody of Led Zeppelin in the "Lay Down" album, you'll be interested to know they did a parody of another well-known group in this set's Bucket T. The public taste for three-chord melodies may be fickle, but when a thing is done well it stays alive longer, and the Who does things well. If only Decca's engineering staff had done their thing well. . . .

N. C.
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TAPE HORIZONS
By CRAIG STARK

HOW HISS HAPPENS

The noise we hear as hiss when we listen to a tape originates not only in the tape itself, but in every stage of the record-playback process. Resis-
tors, semiconductors, and other parts produce hissing, frying, and sputtering noises of differing strengths and in different frequency areas, but the audible result can usually be described simply as hiss.

A major cause of noise pollution on tape is the bias signal used during recording by every home and professional machine. Recording bias is a high-
frequency alternating current (the frequency is usually somewhere between 50,000 and 200,000 Hz) that is fed to the record head along with the audio signal. (A few machines employ a separate "cross-field" head to apply bias to the tape during recording, but the principle remains the same.) Without it tapes would be recorded with so much distortion as to be unlistenable. The adjustment of bias current for optimum recording is extremely critical, and—on a given machine—varies from one type or brand of tape to another.

The bias-oscillator circuit contributes to noise in several ways. First, if the bias current is slightly too weak for a given tape, exaggerated treble response (and hiss) is the recorded result. Second, even if the amount of bias is correct, the bias-signal waveform may not have the optimum shape, which is that of a sine wave. Distortion of the bias-current waveform, like distortion in an ampli-
ifier, produces spurious "harmonics" (exact multiples of the bias frequen-
cy). The second harmonic is an especially potent source of noise. For this reason, high-quality recorders use "push-pull" bias-oscillator circuitry to min-
mize even-numbered harmonics, and incorporate a special internal adjustment to optimize the bias waveform. Third, any sudden surge of bias current in the record head tends to put a small fixed magnetic "charge" on the head gap, and a magnetized head contributes hiss to the recording. If your machine leaves an audible click on the tape when you go into or out of the record mode, there's a good chance that it also tends to magnetize its heads. The cure is simple: demagnetize your tape heads regularly, as I have advised in this column be-
fore. You also might check with the manufacturer of your machine to find out whether its "click" proclivity is normal for the model you have.

Finally, the lower the recording speed, the greater the need for treble boost of the signal in the record-equalization circuit. Boosting the high-frequency part of the signal unfortunately also amplifies the high-frequency noise present at the equalizer circuits. That is why one of the chief advantages of "low-noise" tapes is that they require less treble boost during recording than tapes with "standard" oxide formulations.

As these discussions have indicated, not even Dolby processing will ever give us completely noise-free recordings. But even for non-Dolbyized record-

ings you can minimize hiss by using the tape type specified for your machine, and making sure the proper maintenance and adjustments are performed reg-
ularly. Only then will your recording equipment continue to deliver tapes that have the silence which is golden.
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