incredible tolerances. Which give the 9191 the kind of
wow and flutter figures that no deck in our
price range can match.
Of course, having a great tape transport
system means nothing if you don't have great
electronics to back it up. We do.
The 9191 comes with an advanced three
stage direct coupled amplifier that extends high
frequency response and minimizes distortion.
The built-in Dolby system can reduce tape hiss
by as much as 10 decibels in high frequencies.

Our multiplex filter lets you record FM
broadcasts without picking up a lot of unwanted
noise, or the multiplex signal every FM
station sends out.
Even our ferrite solid tape head offers the
best combination of accuracy and
long life you can get in a cassette
head.
There's also a peak limiter that
lets you cram as much onto a cas-
sette as possible without distortion.
Large VU meters and a peak indi-
cator light that let you know if you
do begin to oversaturate the tape
and distort. Plus separate bias and
equalization switches that let you get
the most out of different brands of
tape. And an automatic CrO2 selector.
If all this isn't enough, you'll find
that the 9191 comes with a memory
that lets you go back to a favorite spot
on the tape automatically. And
electronic solenoid controls for going
from play to rewind, or from rewind to
fast forward, without hitting the stop
button. And without jamming the tape.
There's also the convenience of front
loading. A door over the cassette com-
partment to help keep the tape heads
clean. And a light behind the cassette
that lets you see where you are on the tape.
Go slip a cassette into a Pioneer 9191 at
your local Pioneer dealer.
You'll find it hard to believe such a little thing
could come out sounding so big.

CT-F9191 Specifications:
Frequency Response: Standard, LH tape: 25-16,000 Hz
(35-13,000 Hz ±3dB); CrO2 tape: 20-17,000 Hz
(30-14,000 Hz ±3dB)
Signal-to-Noise Ratio: Dolby OFF: More than 52dB,
Dolby ON: More than 62dB (Over 5,000 Hz,
Standard and LH tapes/When chromium dioxide
tape is used, signal-to-noise ratio is further
improved by 4.5dB over 5kHz)
Harmonic Distortion: No more than 1.7% (0dB)
Wow and Flutter: No more than 0.07% (WRMS)
Motor: Electronically-controlled DC motor (built-in
generator) x 1; (4.8cm/s speed drive), DC torque
motor x 1; (Fast forward and rewind drive)
The recording tape in a cassette is only an eighth of an inch wide. Crammed into that eighth of an inch may be as many as 64 original tracks mixed down to two. A hundred musicians. Countless overdubbings. Not to mention the entire audible frequency range.

Any cassette deck can reproduce part of what's been put down on that eighth of an inch. The Pioneer 9191 was designed to reproduce all of it. Superlatively. Without dropouts, unacceptable tape hiss, or noticeable wow and flutter.

Take our tape transport system. Since the tape in a cassette moves at only 1 7/8 inches per second, even the most minuscule variation in tape speed will make a major variation in sound. To guard against this, where most cassette decks give you one motor, the 9191 comes with two. The first is used only for fast forward and rewind, so the second can be designed exclusively for maintaining a constant speed for play and record.

All of our tape drive components—the capstan, belt, and flywheel—are finished to
WHAT DOES IT TAKE TO GET THE MOST BEAUTIFUL MUSIC OUT OF A LITTLE THING LIKE THIS?
The importance of precision in quality control and accurate playback for analysis of sound, are the reasons MCA states... "Stanton is totally reliable, we depend on it".

MCA (Music Corporation of America) is one of the truly big ones in record production. Quality control in every aspect of their manufacturing, plating and printing is of crucial importance. That is why they use Stanton's Calibrated 681 Series, both in their quality control operation and in their playback for analysis of audio quality.

They even go so far as to "use the needle to test the Mother (Nickel). . . and it stands the wear!"

Throughout the recording industry, both the large and the small depend on Stanton for every aspect of the record-producing operation. Each of the 681 Calibration Series is guaranteed to meet its specifications within exacting limits and the most meaningful warranty possible . . . individual calibration test results comes packed with each unit.

Whether your usage involves recording, broadcast, or home entertainment, your choice should be the choice of the professionals . . . the Stanton 681.

For further information write to: Stanton Magnetics, Terminal Drive, Plainview, N. Y. 11803

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2. Quantum has very high sensitivity. This maximizes output and allows you to effectively capture all signals at a greater level.

3. Quantum provides an excellent signal-to-noise ratio because its high sensitivity is obtained with no increase in noise level. This means a pure, brilliant sound.

4. Quantum gives you high saturation, resulting in a wide dynamic range and broad recording flexibility. Quantum achieves improved recording performance while maintaining a high degree of mechanical excellence. With long life, durability, precision edge quality and excellent oxide adhesion.

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Is it live or is it Memorex?

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**Ultralinear.** It's got a nice sound to it. Still not a name on everybody's lips, but we're getting there. Fast.

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**Ultralinear 77.** A small but mighty 10" 3-way system. With the resettable circuit breaker we build into every speaker for overload protection.

**Ultralinear 225.** Serious competition to the most ambitious bookshelf units. A stunning listening experience in a 12" 3-way monitor system.

**Ultralinear 260.** Our powerful 15" Disco Monitor: a dramatic 4-way floorstanding system, with our exclusive Dual Aperture Tuned Port.

For a closer look at our complete line, write for our color brochure and local dealer locations: Ultralinear, 3228 East 50 St., Los Angeles, CA 90058.
Now the world’s finest tonearm starts at less than $135.

Complete with drive system.

You don’t have to wait till someday to play your records with the world’s finest tonearm. A gimbal-mounted Dual tonearm. You can afford one right now.

We have designed into our lowest-priced turntable, the new 1237, the very same tonearm (and drive system) formerly available only on our highest-priced models.

Advantages of the four-point gimbal suspension.

If you’re not familiar with the gimbal, it’s understandable. Few other tonearms, at any price, have one—despite its widely acknowledged superiority.

A true four-point gimbal centers, balances and pivots the tonearm mass at the precise intersection of the vertical and horizontal axes. The tonearm maintains the perfect balance in all planes essential for optimum tracking.

The Dual gimbal employs identical pairs of tempered and finely-honed needle-point bearings, each set in miniature ball-bearings. During assembly, each gimbal is individually tested and adjusted to assure that bearing friction will be no more than 0.008 gram vertically and 0.016 gram horizontally. If there were a cartridge that could track at forces as low as 0.25 gram, this tonearm would do full justice to it.

Further, the straight-line tubular design (for maximum rigidity and lowest mass) and the settings for zero balance, tracking force and anti-skating are, like the gimbal, identical in every Dual tonearm. The tonearm establishes and maintains the correct cartridge-to-groove geometry, and allows the stylus to trace the groove contours freely, precisely and with the lowest practical force. In short, flawless tracking.

Advantages of the Vario-belt drive system.

Another important inheritance is the Vario-belt drive system. This drive system comprises a high-torque synchronous motor, a precision-ground belt and a machine-balanced, die-cast platter. The Vario-pulley simply expands and contracts for reliable fine-speed adjustments. There are no complicated mechanics or electronic circuitry, which add nothing but cost.

Versatility and reliability too.

We’ve just described the qualities of the new Dual fully automatic line that will make your records sound better and last longer. But there’s more. For versatility, you have fully automatic and manual start and stop, plus provision for multiple play. And cue-control damped in both directions. Plus pitch-control, rotating single-play spindle and multi-scale anti-skating.

Everything we’ve described applies to the 1237, which is, incredibly enough, our lowest-priced model. And where the 1237 ends, the 1241 and 1245 begin. With an even higher degree of performance. And very handsome, contemporary, low-profile bases.

Our further point, all Dual turntables are ruggedly built. They need not be babied, by you or anyone else in your family. As any Dual owner can tell you, they are designed to last for years and years and years.

Now we suggest that you visit your favorite audio dealer and see first hand what Dual engineering is all about. You may then wonder why no other manufacturer puts so much care and precision into a turntable. The answer is simply this. For more than seventy-five years, craftsmanship of the very highest order has been a way of life with the Dual people in the Black Forest. As nowhere else in the entire world.

---

Dual 1237: less than $135; base and cover less than $30 additional.
Dual 1241: less than $200, including deluxe base and cover.
Dual 1245: less than $230, including deluxe base and cover.
Other Duals to $400. Actual resale prices are determined by and at the sole discretion of authorized Dual dealers.

Dual For the life of your records
United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553
CIRCLE 17 ON READER-SERVICE CARD
COMING NEXT MONTH

Early fall brings around a SPEAKER ISSUE once again. This year seems to be the season in the sun for phase-coherence, and Peter Mitchell assesses it in What Time Dispersion in Loudspeakers is All About. Emil Torick, audio systems technology director for CBS and president-elect of the Audio Engineering Society, will write his Inside the Speaking Testing Lab for a look at HF's testing methodology. Continuing our celebrations of the recording centenary, Jim Jonson's color acrylic rendering of The LP, Stereo and Beyond completes his series of four specially commissioned paintings, and Paubon Bowers' dramatic account of The Recording that Ended World War II complements it. Plus Rosalyn Tureck on Bach and the Piano, lab reports on five speakers, BACKBEAT, and much more.

SOLUTION TO HIFI-CROSTIC NO. 27

[KLARL] GEIRINGER: [Johann Sebastian Bach, The]

If an attempt were made to characterize the art of Johann Sebastian Bach in a single word, it would have to be "unification." The most heterogeneous elements were welded together by him into a new entity, the gigantic structure of Sebastian's personal idiom.

LETTERS

Good-by RFI?

As you note in a recent "News and Views" item [June], radio-frequency interference (RFI) with audio equipment is a rapidly increasing problem. It is true, as you suggest, that much of this interference arises from the illegal use of amplifiers by CB operators and that complaints to the FCC by offended audiophiles who have investigated the situation may help in bringing such airborne pollutants to justice.

However, let us also remember that a majority of the 15 million CB radios in the U.S. are using legal power. In addition, there are 300,000 licensed amateur radio stations (hams), most of which may legally use up to 1,000 watts (or 30 dBW, if you prefer), and millions of police, fire, and other public-service transmitters. All of these transmitters, operating under perfectly legal conditions, may produce unacceptable RFI in nearby equipment.

The largest proportion of this RFI can be corrected only at the audio installation itself—by a technically competent audiophile or service technician, and possibly with assistance from the radio operator. (It should be pointed out that CB operators, unlike hams, have not had to be examined on their technical proficiency.) As a technical and economic matter, it would be far preferable to incorporate interference-rejection features into the audio equipment at manufacture; unfortunately, this is unlikely to happen without legislation such as that to which you allude—specifically, something like the Goldwater-Vanik bill.

While it is true that some RFI-suppression measures may affect audio system performance in extreme cases, most would have no effect whatever. And there is no reason why the more drastic measures could not be made switchable, like rumble and scratch filters. In short, I believe the audiophile's true interest lies in supporting the Goldwater-Vanik bill, rather than opposing it.

Ray Soifer
Glen Rock, N.J.

SOLUTION TO HIFI-CROSTIC NO. 27


If an attempt were made to characterize the art of Johann Sebastian Bach in a single word, it would have to be "unification." The most heterogeneous elements were welded together by him into a new entity, the gigantic structure of Sebastian's personal idiom.


CIRCLE 24 ON READER-SERVICE CARD →
The new Auditor™ Series by Koss. Don't buy one unless your system is ready for it.

The pleasure of listening to unadulterated music is reserved for those who have carefully put together a system that delivers totally accurate reproduction. Now, for people who wish to explore and expand this realm of pure sound, Koss has designed their Auditor Stereo Headphones. Full, state of the art knowledge of perfect mechanical reproduction of music, and the psychoacoustics of the way the ear and mind respond to sound went into making these phones true to the most intense level of performance possible today.

The sound.
The Auditor Dynamic/10 features an expansive frequency response range of 10-20,000 Hz, while dazzling any ear attuned to the delicate musical balance of psychoacoustically pleasing sound, in a way no other dynamic phone can duplicate. They are designed to deliver the full impact of letter perfect sound reproduction characteristic of the finest equipment.

And the fury.
On the other hand, for the most carefully designed and engineered excursion into sound ever, the Koss ESP™/10 Electrostatic Stereo Headphone is an unparalleled instrument of beauty. It is a perfectly articulated statement of technological and electronic genius so thoroughly sensitive it belongs in a recording studio serving as the last word in monitoring production. The ESP/10's almost boundless frequency response lays out the entire spectrum of sound for your scrutiny, bringing you every spark of timing, a deep, rich flood of bass, and a smooth, clear lake of treble, with every note balanced and defined.

So if you're content to live with the impurities in second best stereo, the Koss Auditors aren't for you. Only the high-end connoisseur who has taken all the necessary steps toward putting together a system that is true to perfection will acknowledge and appreciate these precise products as breakthroughs in scientific musical development. The personal signature of John C. Koss says that these headphones are for the audiophile. So if you're ready for the best, and you think your system can measure up to the Sound of Koss, hear the headphones that are designed to put it to the test at a specialist in audio products near you. Or write to Fred Forbes, Audiophile Products Division, for more information on the new Auditor Series by Koss.

The new Auditor™ Series by Koss.
recently resubscribed after a few years off the list. The monthly puzzle is an aggravation and a delight. I know several subscribers who, like myself, assail the puzzle before reading the rest of the magazine.

C. W. Christian
Waco, Tex.

Henry Samuels
Columbus, Ohio

You might be interested in knowing that the one item that tipped the scales in favor of my continuing my subscription was the HiFi-Crostic, which I find very challenging and most enjoyable.

R. R. Parkman
Carnegie, Pa.

Whatever you do, don't stop the HiFi-Crostics. I really enjoy solving them, even if I do have to look up answers in Schwann and my music encyclopedia.

Robert L. Labrie
Auburn, Maine

The HiFi-Crostic is the first thing I look for every month when my magazine comes in.

Marjorie DiSano
Johnston, R.I.

Drop the HiFi-Crostics? Aaagh!

Lelia Loban Lee
Falls Church, Va.

All right, stop already! We'll keep them!

Copyright Debate

Congratulations to Leonard Feist for his gallant attempt to explain an area as complex as the new copyright law [June]. However, we must remember that he represents those people who would benefit most from stricter copyright protection—the proprietors.

Early this year, in the course of my postgraduate studies in the legal field, I did an exhaustive study of the new copyright law and its implications for the hobbyist. Mr. Feist seems to agree with those who believe the law should be applicable to the general public. Yet the authors of the law are of the opposite inclination. Indeed, they said in the legislative history that no restrictions of the traditional freedom of the hobbyist, as developed for more than twenty years, was intended by the law. What judicial interpretations have been made of the antipiracy act of 1971 indicate that sound recording copyright protection is to prevent unfair competition with record manufacturers and composers by "pirates" and does not encompass the single copies made for one's own use. All but one of the legal scholars who have addressed themselves to this problem agree that nothing in the law would change the time-honored privilege of the individual to do with his possessions, including his tape machine and records, as he pleases.

Mr. Feist, being in the business, should realize that the key is "willful infringement for profit."

Don E. Ballard
San Jose, Calif.

It is hard to understand how Mr. Ballard concluded that Mr. Feist agrees with "those who believe the law should be applicable to the general public." In fact, Mr. Feist made no interpretation of the applicability of the relevant portions of the law to private copying. He noted only that "many ... believe that the limitations set down in the new law on the exclusive right to reproduce a work are specific to the use and the user and are not applicable to the general public."

Furtwangler's Second

DG's reissue of Furtwangler's Second Symphony is a heartening sign of growing public interest in that great musician's creative work, and I hope David Hamilton's detailed review [April] will inspire many HF readers to acquaint themselves with Furtwangler the composer. For that very reason, however, I feel that Mr. Hamilton's remarks call for a few additions and corrections.

For one thing, Furtwangler composed considerably more music than Mr. Hamilton indicated, and he wrote it in largely uninterrupted sequence. More than eighty works spanning the period from 1893-1954 are extant, including at least eleven symphonies.

What is more important—and what is most widely ignored—is the paramount position of composition in his life. Unlike even the most idealistic of the other performers who "also composed" (e.g., Schnabel, Klemperer, Weingartner, Fritz Busch), Furtwangler considered himself first and foremost a composer. This was true from the beginning of his life to the end. It is stated countless times in his letters, Tagebiicher, and published writings, and it is confirmed by his colleagues and intimate friends. Furtwangler made his conducting debut, in fact, in the role of interpreter of one of his own symphonies (Munich, 1906). Moreover, his decision to make conducting his career was essentially a practical one, occasioned by the financial uncertainty in which his family was placed by his father's death shortly after that debut.

Now, to recognize this fact is not in any way to demean Furtwangler's extraordinary status as a re-creative musician; there can be no doubt of his passion for performance or of the obligation under which he felt himself placed by his unique interpretative powers. Rather, to acknowledge the primacy of composition in Furtwangler's view of his mission as a musician is to discover the source of those powers.

It is with regard to the Second Symphony in particular that I feel Mr. Hamilton's remarks, however reasoned and sincere, are most misleading. The impression of a prevailingly gray, turbid texture, for example, must be attributed entirely to the less-than-top-notch engineering. A few minutes' study of the score (published in}
1976: ADC CLAIMS THE XLM MK II SHOWS "NO PERCEIVABLE WEAR OVER THE LIFE OF A RECORD" AND PROVES IT.

1977: ADC CLAIMS THE NEW ZLM WITH THE ALIPTIC® STYLUS HAS EVEN LOWER WEAR AND BETTER PERFORMANCE. AND PROVES IT AGAIN.

Introducing the ADC ZLM cartridge with the ALIPTIC® stylus. It's a revolutionary new cartridge design that has taken the state of the art a giant step closer to the state of perfection.

Because of last year's XLM MK II record wear test results, we confirmed our thinking on how to design the perfect stylus tip shape. It combines the better stereo reproduction of the elliptical stylus shape with the longer, lower wearing, vertical bearing radius of the Shibata shape. The result is our revolutionary new ALIPTIC® stylus.

And that's only the beginning. The ALIPTIC® shape is polished onto a tiny 0.004" x 0.008" rectangular nude diamond shank, which has reduced the tip mass of the XLM MK II by an incredible 50%. This tiny stone is mounted on our new, tapered cantilever, which reduces effective tip mass even further.

The XLM MK II tests also proved the importance of tip polish in reducing record wear. So the ZLM is polished with a new, more expensive, more effective patented polishing method.

The ADC XLM MK II has long been known for its uncolored, true sound reproduction. The ZLM goes even further. Sound reproduction is completely open and spatial. And individual instrument placement can now be identified with even greater ease.

The ZLM tracks between 1/2 and 1 gram. Frequency response is 1 dB to 20 kHz and is flat to even higher frequencies, out to 26 kHz ± 1 1/2 dB.

As you can see, by reducing the tip mass even further, we've come closer to the ultimate in pure sound reproduction. To prove it, every ZLM comes with its own individual frequency response curve, signed by the ADC technician who tested it.

This means that the ZLM cartridge will reach every sound lying dormant in your records, transmitting them faithfully through your hi-fi system without altering the sound or the health of your records.

Not only do we think the ZLM is one of the most exciting cartridge designs to come along in years, but we can prove it.

Superior performance we can prove.
Six fine speaker systems that can help you decide if you should own the Ditton 66 instead.

Not all speakers are deliberately designed to be as neutral and uncolored as are Celestions. This led one audio publication to say of our Ditton Monitor 66: "...may sound unspectacular, even disappointing to the untrained ear."

Of course. Speakers should not be "spectacular" or even impressive. They should be accurate, precise and faithful to the program material, rather than serve some designer's notion of what would impress the unwary or untutored ear.

If your ear is anything like this reviewer's, you too will hear: "...no thump or sizzle...just the neutral sound of musical instruments playing with nothing added by the speakers."

Nevertheless, tastes do vary. Thus, we have selected six fine speaker systems priced within the range of the Ditton 66. Any of them is likely to prove acceptable to a reasonably discerning listener.

Even against such respectable competition, we feel a goodly number of people will prefer the performance of the Ditton 66. Once you audition them, it's very likely that you'll agree. After all, they're our crowning achievement after fifty years as one of Britain's major designers and manufacturers of loudspeakers.

Cheers!

The Ditton Monitor 66 by Celestion
Shown without black snap-on grill-cloth. 12" FC-12 woofer is acoustically coupled to the unique Auxiliary Bass Radiator (ABR) for distortion-free response at the lowest frequencies. MD-500 2½" soft-dome mid-range and HP-3000 soft-dome tweeter provide exceptionally smooth response, wide dispersion and correct phase relationships throughout the middle and upper ranges. Available in walnut or teak finish. 15"w x 11"d x 39½"h. $499.50.

Celestion
Loudspeakers for the perfectionist

Celestion Industries, Inc., Kuniholm Drive, Holliston, MA. 01746
In Canada: ROCOLO INC Montreal

Recordings: Rare and Rediscovered

In his review of Mstislav Rostropovich's performance of Shostakovich's Fourteenth Symphony [June], Royal S. Brown claims that "the recording ... is the work's third, and the second to come from the Soviet Union."

According to a recent edition of the Japanese equivalent of SCHWANN, there is yet another performance available in that country, also Russian-derived. It features the Moscow Philharmonic Orchestra under Kiril Kondrashin and has been available since November 1975 on the SMK label (7860).

Michael Quigley
Vancouver, B.C.

In his discussion of Trial by Jury in the Gilbert & Sullivan discography [May], Richard Dyer dismisses Thespis with the traditional view that the music has been lost except for
The engineers who conceived the state-of-the-art DDX 1000 are pleased to announce the MB 15.

At less than one fourth the price.

With its three-tonearm capability, its $600 nationally advertised value, and its optional highly-acclaimed MA 505 tonearms, the Micro Seiki DDX 1000 has been accepted as one of the unique advances in turntable concept and design.

Using the same technology, our engineering team has crafted the MB 15 to achieve economy, while preserving musical accuracy.

Elegant and understated, its economy of design reveals not one extra line—contains not one unnecessary part.

An electronic sensor controls shutoff and arm-lift operation: a Hall-effect IC sensor detects a change in tonearm speed at the end of the record and activates a viscous-damped device which lifts the tonearm and shuts off power.

Its diecast aluminum platter is driven by a 4-pole synchronous motor coupled with a precision-polished belt that effectively acts as a damping device; wow and flutter is less than 0.06%.

A solenoid-activated cueing system and an easy-to-adjust anti-skating control are among its attractions. The MB 15 tonearm headshell is detachable for ease in mounting cartridges.

At $150 (nationally advertised value)* you can considerably enhance the enjoyment of your records with Micro Seiki purity of sound.

Isn’t it time to upgrade your pleasure?

MICRO SEIKI
Advanced engineering in turntables.

*Actual resale prices will be determined individually and at the sole discretion of authorized Micro Seiki dealers.
Only JVC offers a built-in graphic equalizer for more flexible control of the entire audio spectrum.
One of the very special features you'll find in our three top-of-the-line JVC receivers is our exclusive SEA five-band graphic equalizer. It replaces conventional tone controls to give you more flexible control over every segment of the musical spectrum, from low lows to high highs. (And our JR-S100 II and JR-S200 II offer the same professional-style slider tone controls.)

Our JR-S300 II, JR-S400 II and JR-S600 II give you another exclusive feature: you can switch the SEA equalizer section into the tape recorder circuit, so you can "EQ" as you record, just like the pros do.

JVC's superb Mark II Professional Series receivers give you so many useful features. Like separate power, tuning and signal strength meters, a team of triple power protection circuits, and more power than ever before (our JR-S600 II offers 120 watts/channel, RMS.* And carries a price of less than $600,** for example).

Once you've seen the things we build in, you'll wonder why others leave them out.


For your nearest JVC dealer, call toll-free (outside N.Y.) 800-221-7502.

* @ 8 ohms, both channels driven from 20Hz to 20kHz, with no more than 0.08% total harmonic distortion. **Approximate retail value.
To find out how much better our cartridge sounds, play their demonstration record!

There are some very good test and demonstration records available. Some are designed to show off the capabilities of better-than-average cartridges...and reveal the weaknesses of inferior models. We love them all.

Because the tougher the record, the better our Dual Magnet™ cartridges perform. Bring on the most stringent test record you can find. Or a demanding direct-to-disc recording if you will. Choose the Audio-Technica cartridge that meets your cost and performance objectives. Then listen.

Find out for yourself that when it comes to a duel between our cartridge and theirs...we're ready. Even when they choose the weapons! What you'll hear is the best kind of proof that our Dual Magnet design and uncompromising craftsmanship is one of the most attractive values in high fidelity. For their records...and yours!

Audio-Technica U.S., Inc.
Dept. 97H, 33 Shiwawesse Avenue, Fairlawn, Ohio 44313
In Canada: Superior Electronics, Inc.

In Robert P. Morgan's review of Dietrich Fischer-Dieskau singing Charles Ives's songs [April] the statement is made: "Included are five songs not previously available on record."

Although it may not now be available, I have owned for several years a collection of Ives songs sung by Helen Boatwright (John Kirkpatrick on piano) on Overtone Records 7. recorded in 1954. Included in the collection are two of those five songs cited in Mr. Morgan's review: "Abide with Me" and "Disclosure."

Mel Schuster
New York, N.Y.

Massenet Society

It appears that the Massenet revival is now in full swing. The recently released recordings of Esclarmonde, Le Cid, Thais, and La Navarraise and the planned recordings or revivals of Cendrillon, Héroïdiade, and Le Roi de Lahore surely support the assumption.

I would like to make your readers aware of a venture just undertaken: An American branch of the Massenet Society, founded in London by Miss Stella Wright, has been formed. Members from the tri-state area—New York, New Jersey, and Connecticut—recently held their first meeting, and it was a huge success.

The Massenet Society is a nonprofit cultural organization whose purpose is to promote the works of Jules Massenet to music and opera lovers throughout the world. This will be accomplished in the U.S. through discussions and the distribution of recordings of many of his unfamiliar but important works. Most of the material comes from the private collections of our members. For information please write the Massenet Society, c/o Michael Paul Lund, 41 E. Central Ave., Pearl River, N.Y. 10965.

Martin S. Lipman
Old Greenwich, Conn.
Free for 10 days:
von Karajan conducts
Beethoven

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Britten's Legacy: To Be “Useful to the Living”

by John Culshaw

ALDEBURGH—I have just returned from my first visit to Aldeburgh since Benjamin Britten died last December. He is buried in the grounds of the parish church. A tree has been planted at the foot of the small plot, and the stone is inscribed simply “BENJAMIN BRITTEN 1913–1976.” The weather on the day I was there was straight out of Peter Grimes, Act I, Scene 2: The sea raged, the wind howled, and the rain turned unpaved pathways into troughs of mud. The fishermen did not put to sea that day but took refuge in the pubs.

I am neither superstitious nor, I hope, sentimental, but it seems to me that Britten’s spirit haunts Aldeburgh and the Maltings at Snape in the same way that Wagner’s haunts Bayreuth and the Festspielhaus on the Green Hill. Perhaps it has to do with the smallness of both Aldeburgh and Bayreuth, for it is probable that most of us would never have heard of either had it not been for the composers who adopted them. Certainly it is a feeling that never comes over me in a city. No matter how much one loves their music, the spirits of Schubert and Johann Strauss have little relevance to modern Vienna. We can see where they lived and worked and pay dutiful visits to monuments and museums, but they are simply not present in the uncanny way that Wagner seems present in Bayreuth and Britten in Aldeburgh.

Britten has not left a legacy of unpublished music. His very last work (still unperformed at the time of writing) is called A Welcome Ode and is written for young voices (SAB) and orchestra. I am told that it lasts only about eight minutes. Apart from that there is nothing except a piece called Quartette, which turned up mysteriously in a London salesroom some weeks ago and was bought anonymously for about $12,000. The manuscript is dated January 1928, which means that he wrote it when he was fourteen or younger, and the theory is that he gave it to a local quartet in the hope of getting it performed and then forgot all about it when the performance didn’t materialize; but that’s somewhat out of character, because Britten was meticulous and had a very clear memory. However, if it does seem to be agreed that, whatever its origins, Quartette is not a fake.

Some months before his death Britten bought the empty, ramshackle East Suffolk Hotel in the middle of Aldeburgh’s main street. It has now been converted to provide the festival with its first satisfactory offices in thirty years. (The old ones were clustered at the top of a narrow staircase in the lo-
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8. The Big Bands

by Gene Lees

The Swing Era had such an impact on American music that it is hard to believe it lasted only thirteen years—more or less, depending on who is doing the figuring. Short though it was, it was a time when a great deal of popular music was good and a great deal of good music was popular.

The tributaries of this vast river of superior popular music arose in the 1920s, although it can be argued that the true source was the marching bands of New Orleans. Certainly the New Orleans street bands largely defined the instrumentation of the Swing Era, for reasons one can appreciate on recalling the surreally funny scene in Take the Money and Run in which Woody Allen plays the cello in a parade, bowing and advancing his chair, bowing and advancing his chair. The instruments were those that were portable and loud enough to be heard in the open air.

But by the Twenties, bands were sitting down. Benny Carter, one of the most gifted soloists, composers, and arrangers of the period, recalled recently that when he played in the Charlie Johnston band it comprised
Tian samba, which is not jazz even though it shares its ancestry and interacts with jazz readily. Nor will it do to say that jazz is an improvised music; one prominent musician stretched the definition so far as to state that, if he heard Chopin improvising, he would call that jazz. There are many forms of improvised music, including some of that produced by church organists, which is clearly not jazz. And that definition collapses in the face of the adventurous experiments in jazz orchestration that were characteristic of the Swing Era.

These experiments date from the 1920s, and the principal figures were Duke Ellington and a saxophonist/arranger named Don Redman. Redman is generally credited by musicians active at the time with dividing the trumpets, trombones, and saxophones into separate choirs working over the rhythm section. Ellington, who even then was using baritone saxophone to add color and fortify the bottom of the orchestra, was moving in another direction. Whereas Redman maintained the integrity of the sections, using them as accompaniments to each other, Ellington was using his instruments in unusual combinations, mixing them up through the sections, as it were. And Duke was becoming more and more daring in explorations of harmony, eventually voicing the band with moving upper-structure triads to produce an eerie, almost disembodied and highly idiosyncratic sound.

The thinking of these two men, modified and transmuted to be sure, has dominated nonclassical orchestral writing in the U.S., and indeed much of the world, to this day. The problem with embracing Ellington’s approach is that it sounds so obviously Ellingtonesque, although such writers as Thad Jones and Clare Fischer have been able to use it without seeming too conspicuously derivative, partly by using flutes, which Ellington never used. (Nor for that matter did anyone else, except Chick Webb, prior to the 1950s.)

Though Redman is the less celebrated, he had a wider effect than Ellington, and it was the basis on which the Swing Era developed. He seems to have influenced Fletcher Henderson directly and, through Henderson, other writers. Benny Carter, who joined the band of Henderson’s brother Horace in 1926, says that Fletcher’s arrangements, which had been copied and given to the band, were his first real encounter with the Redman-Henderson school of thought. Henderson had his own band at one time, and after it failed Benny Goodman bought many of its arrangements and hired Henderson to write more. When
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Goodman became a success—indeed, one of the most remarkable commercial phenomena of the period—others formed bands or else found that bands already organized were suddenly in demand. The instrumentation and approach to orchestration was modeled on that of Goodman, which is to say Henderson.

By the early 1940s, the orchestras were expanding in size from four saxophones to five, with the welcome addition of the baritone, which contributed ballast and removed a slight soupiness from the sound of the section; from three to four and sometimes even five trumpets; and from two to three or four trombones. At least a few of the bands—like those of Artie Shaw, Tommy Dorsey, Gene Krupa, Harry James, and Stan Kenton—experimented with string sections. The effect left much to be desired, since five trumpets and four trombones played in a jazz forte can drown out a full symphony string section.

But the main area of experimentation was harmonic. For years the thinking of arrangers had been far in advance of that of the players and the public. Redman, born in 1900, graduated from the Boston Conservatory and thus was well aware of the works of classical composers. So was Bix Beiderbecke, evidence for which is found not so much in his recorded cornet solos as in his piano compositions. Big-band harmony became increasingly complex, chromatic, and dissonant. Experiments with polytonality were underway, and Kenton pushed his band close to symphonic music.

The big-band era reached its fullest flowering after World War II. Whereas many of the prewar arrangements and recordings now sound thin—even archaic—the best of the postwar records retain their freshness, validity, and vitality. They do not sound naive; they do not sound like music seeking its maturity. The music is mature. The rhythm sections have lost their awkwardness, and the forward motion of the music is strong, unimpeded, and natural.

But no sooner had it achieved maturity and international popularity than it began to wither. And soon it was all over.

Why did it happen? One reason is that the bands carried the seeds of their own destruction within them, namely the band singers. The best of these was a young man named Frank Sinatra, who developed the delivery of a small thirty-two-bar popular song into art. So influential was Sinatra in the evolution of postwar music that I will devote the entire next column to him.
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A Preview of Industry Releases

Recordings '78

QUESTION: What do Rafael Kubelik, the New York Philharmonic, James Levine, Bernard Haitink, Leonard Bernstein, and the Tokyo Quartet have in common? Answer: These former company stalwarts all turn up in unexpected places in this year's survey of planned releases (respectively London, RCA, Columbia, London, Angel and DG, and Vanguard and RCA). It's a bit startling even in this jaded era of nonexclusivity, and we can expect more of the same. Kubelik, for example, also has Hindemith's Mathis der Maler in the works for EMI, and the Philadelphia Orchestra is about to begin recording for EMI (under music director Eugene Ormandy as well as principal guest conductor Riccardo Muti) in addition to RCA.

As you dive into the lists, remember that they are tentative. Most of the records listed will appear before next year's preview, but not all—and some will disappear without a trace. Nor are these lists in any way complete; many in fact cover only the fall, and it is difficult to project even that far ahead with certainty in time for our June deadline. You might bear in mind the description that Nonesuch's Tracey Sterne applied to her list: "A Sampling" of fall/winter releases.

We indicate reissues (●) and quad issues (Q) where that information is known. Again, quad plans often aren't settled by our deadline, so quadruphiles can look forward to some surprises. Finally, some space-saving abbreviations have been used for orchestra names: O for Orchestra appears alone and in appropriate combination with S (Symphony), P (Philharmonic), R (Radio), and C (Chamber).

ABC Classics

Bach: Brandenburg Concertos. Brüggen, Leonhardt; Leonhardt Consort.
Duphly: Harpsichord Works. Leonhardt.
Gagliano: La Dafne. White et al.; Musica Pacifica, Vorwerk.
Mendelssohn: Piano Trios (2) (Mirecourt Trio).
Purcell: Fairy Queen. Oxford University, Pinnock.
Scriabin: Prometheus. Böhm; 0 Berlin PO, Rattle.
Tchaikovsky: Serenade for Strings. Orchestra of St. John's, Passion.

Advent

ON CASSETTE ONLY.
Beethoven: Piano Sonatas Nos. 4, 17. S. meier.
Handel: Messiah. Haagland, Gore, Living, Evitts; Handel and Haydn Society (Boston), Dunn.

Angel

Berlioz: Harold in Italy. McInnes, O, National de France, Bernstein.
Bloch: Sacred Service. D. Lawrence; Utah Chorale, Utah SO, Abravanel.
Brahms: Symphonies (4). London PO, Jochem.
Brahms: Violin Concerto. Perlman; Chicago SO, Giulini.
Bruckner: Symphony No. 9. Chicago SO, Giulini.

Archiv

Gagliano: La Dafne. Lasser, Schlick, Koller, Rogers, Partridge, Thomas, Possemeyer; Hamburg Monteverdi Choir, Jürgens.
Verdi: Overtures. New Philharmonia, Muti.
Villa-Lobos: Morfeo precoce; Bachianas brasileiras No. 3. Ortiz; New Philharmonia, Askenazy.
Mirella Freni: Operatic Recital. Votto, Ferraris, and Magiera, cond.

Candide

Bartók: Concerto for Orchestra; Dance Suite. Minnesota O, Skrowaczewski.
Rachmoninoff: Symphony No. 1. St. Louis SO, Slatkin.

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SEPTEMBER 1977
COLUMBIA

C Bizet: Nuits d'été, Mort de Cléopâtre. Minturn, Brandon.
D Brahms: Intermezzo No. 2 in G Minor. N. Said, U. Phil.
F Chopin: No. 3. "Etude". "London" (Phil). Pears

COLUMBIA/ALPACINO

I Shostakovich: The Nose. Soloists: Moscow Chamber Opera, Rozhdestvensky.

Baris Skotolov: Recital.

Composers Recordings, Inc. (CRI)


Cooper String Quartet No. 5. Shepherd Qt. Milburn: String Quartet. Concord Qt.


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Chausson: Symphony, O du Capitole (piano), Plateau, Fein.


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Scrinia: Piano Sonatas (10). Block.

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Delos
Delos: Hasson (incidental music). Solists: English Sinfonia O.
Goerlitz: Porgy and Bass Suite. C. Porter: Within the Quatro & J. Bennett, Brabham.
Musica Nova: Pictures of an Exhibition & Browning.
Schumann: Organ Works (complete). Letterer.
Szymanowski: Piano Works, Vol. 3.

Rachmaninoff: Piano Concerto No. 4, Paganini Rhapsody. Varas. London SO, Ara
Schumann: Symphonies (4). Chicago SO, Barenboim.
Tchaikovsky: Symphony No. 5. Boston SO.
Ozawa.
Vaughan Williams: Tufo Concerto Chicago SO, Barenboim.
American Choral Works. Tanglewood Festival Chorus, Oliver.

Everest
- Bach: Keyboard Concertos (2). Richter. V.
- Schubert: Symphonies Nos. 5. and 8. Georges Enesco SO (Romania), Romabilliad.
Tchaikovsky: Serenade for Strings (plus works by Vivaldi, Gruber). Solisti di Zagreb.
- Wagner: Ring excerpts. Flagstad; La Scala, S.
- Schubert: Symphonies Nos. 5. and 8. Georges Enesco SO (Romania), Romabilliad.
Tchaikovsky: Serenade for Strings (plus works by Vivaldi, Gruber). Solisti di Zagreb.
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Tchaikovsky: Serenade for Strings (plus works by Vivaldi, Gruber). Solisti di Zagreb.
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- Schubert: Symphonies Nos. 5. and 8. Georges Enesco SO (Romania), Romabilliad.
Tchaikovsky: Serenade for Strings (plus works by Vivaldi, Gruber). Solisti di Zagreb.
- Wagner: Ring excerpts. Flagstad; La Scala, S.
250 watts per channel
(minimum RMS at 8 Ohms, 20-20,000 Hz)
with no more than 0.05% THD!
The Marantz 2500 is the most powerful receiver on the face of the earth.
The Marantz 2500 handles tremendous power effortlessly. Its Toroidal Power Transformer has been especially designed to give you two independent power supply sections, allowing each channel to perform at maximum efficiency and remain unaffected by the power demands of the other channel. The super-efficient tunnel “pin-fin” heat sink design was originally developed for the Marantz 510M Professional Amplifier. All this power is generated by virtually the most sophisticated amplifier section on the market today: a full complementary symmetry direct-coupled output. Even more, it utilizes a quadruple-paralleled transistor array—a design never before incorporated into a receiver. The result is the highest possible day-in, day-out operating reliability and the lowest Total Harmonic Distortion: no more than 0.05%.

Built-in oscilloscope
a Marantz “first” and the most precise signal display device ever developed.

Plug-in optional Dolby** FM Noise Reduction Circuitry assures you the lowest noise possible with FM reception. Works in tandem with a 25 microsecond de-emphasis circuit for proper reception of Dolby FM, the new generation in stereo broadcasting.

18 dB per octave
Bessel-derived high filter—a superior linear phase filter design—the most advanced in audio. It reduces high frequency noise—and does the job with a more natural, less colored sound because it eliminates the overshoot and “ringing” common to other filters.

18 dB per octave 15 Hz
sub-sonic Butterworth low filter cuts sub-sonic transients and rumble that robs you of the amplifier power vital for accurate reproduction of low-frequency signals. The Butterworth low filter assures that all your power is used to reproduce only actual program material. Not wasted on unwanted noise or rumble.

2 LED peak power indicators continuously monitor the amplifier section and instantly let you know when transients are driving the amplifier to full output.

5-gang FM tuning capacitor and dual-gate MOS FET FM front end ensure superior linearity and rejection of spurious signals with an IHF usable sensitivity of 1.5 microvolts and a 50 dB “quieting sensitivity” figure in stereo of 25 microvolts—the finest such specification ever obtained in a receiver—or even a separate tuner. The quieting slope measures signal-to-noise performance under actual operating conditions. The graph shows complete stereo and mono quieting specifications for the Model 2500.

And the incredible Marantz 2500 also gives you: Six tone controls—3 for each channel. Selectable frequency turnover points. Independent tape copy facility. Phase-locked loop. Linear phase IF filters. LED function indicators. Gyro-touch tuning. And much, much more. In virtually every area of performance, the Marantz 2500 exceeds any other receiver on the market today.

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Not everyone can afford the Marantz 2500, but those who can will possess the world's most outstanding stereo receiver. The Marantz 2500 is our most significant achievement to date. The first and only stereo receiver to harness such tremendous power. And yet the size and weight is so practical it fits conveniently onto shelves or into cabinets. The Marantz 2500 offers the most impressive performance feature package and specs ever engineered into one stereo receiver.
HNH Records
Always Nocturne, Finzi: Nocturne; Fall of Leaf; Introit; Prelude. Dufay: Misso Ecce ancilla. Clemencic Consort.
Purcell: Catches; Lamentate Cecilian. If ever I more requite of desire. Deller Consort. Purcell, Indian Queen, Taverner of Athens. Deller Consort.
Tagetes de Santa Maria, Vols. 1-2. Clemencic Consort.
Note: All releases are newly mastered, with sound substantially improved over previous issues of this material.
London
J. S. Bach: Orchestral Suites. L. Kovacs; Lisitz, Szeged i.
Dohnanyi: String Quartets, Opp. 7, 15/2. Kodaly O. Khrim.
Lisitz: A Violin Play, Tosa, Tott. Latzauskas, Petravicius: String Quartets. New Budapest QT.
Mercury Golden Imports
Mozart, Haydn: String Quartets. Op. 64. Tatra PO.
Lisitz: A Violin Play, Tosa, Tott. Latzauskas, Petravicius: String Quartets. New Budapest QT.
Note: Release lists for the London import labels (Argo, Oiseau-Lyre, Telefunken) and for London Treasury were not available at press time.
Louisville First Edition
Lychord
South American Baroque Composers. Pro Musica de Rosario. Plus disc devoted to Jamaican reggae ceremony music, Latin American dance music, music of the style of Elton John, Stevie Wonder, and to instructional (all feature the Louisiana Orchesa.)
Music Group, Inc.
MUSIC MINUS ONE
The 750-record MMO catalog of participation records (ranging from classical to contemporary to instructional) will be expanded to include sing-along records of songs in the style of Elton John, Stevie Wonder, and Fleetwood Mac.
GUITAR WORLD
New releases will feature the French guitarist Marcel Dadi, including two all-star Nashville sessions with Charlie McCoy, Bill
AFTER YEARS OF THINKING, DESIGNING AND TESTING, BSR PRESENTS TWO BRAND NEW IDEAS. TURNTABLES THAT COMBINE THE LATEST TECHNOLOGICAL ADVANCES WITH SPACE-AGE STYLING. QUANTA.

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**CLASSIC JAZZ**

New releases "will continue to feature some of the greatest recordings in a pre-1960 feel, including a bebop reunion with Dizzy Gillespie, John Lewis, and Sonny Stitt; a Teddy Wilson trio; and a Dixieland series by Jim Cullum."

**Muza**

(distributed by Qualiton Records)

Handel: Organ Concertos. Bucher, Grubic; Warsaw PCO, Teutsch.

**New World**

Beach, Foote: Violin Sonatas. Silverstein, Kalish.


Ford: Works for small jazz ensemble.


Paine: Mass in D. St. Louis SO, Schuller.


Schuman: String Quartet No. 4. Schuller: String Quartet No. 2.


Shepherd: Triptych. Cowell: Quartet Euphonic. Harris: Three Variations. Norden (s); Emerson Qt.


Taylor, C: Work for large jazz ensemble.


Vivaldi: Violin Concertos. Kaufman, Dart. Vivaldi Festival CO.


James Nightingale: New Music for Electric Accordion.


**Pandora**

Bach: Music for Keyboard Lute. Goldstein (played on re-creation of Bach's instrument).

Chopin, Liszt: Piano Works. Goldstein (played on a contemporary instrument).


**Pearl**

(distributed by Qualiton Records)


**Pelican**


Mona and Renee Colavecchio: Duo-Pianists. Works by Ravel, Dohnanyi, Bizet.

Dorothy Kirsten: Operatic Recital. From radio broadcasts of the '40s.


The Rogue Song. 1930 film soundtrack starring Tilmouth and Hardy. Mme Schumann-Heink on the Air. From 1934 radio broadcasts.
We are proud of the specifications on our equipment. We have plenty of independent, expert audio testimony that they’re good. But all you want is the best sound you can get.

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We build for a wide, minimally distorted frequency range, for uncolored electronic translation of everything that was put into the program material. If you want to change it to suit your preferences you have the facilities built in. But that’s your change, not ours.

When you’re buying audio equipment, look at specs if you want. But your best bet is still to play it by ear. And if we didn’t have good specs to start with, we couldn’t say this.

But specs are the same whoever reads them. Only you know what you like to hear. Listen. You’ll like us.

Artistry in Sound ONKYO

Play it by ear with these Onkyo components.

A-10 Solid State Integrated Amplifier
85 watts per channel, minimum RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% THD. Phono SNR 78 dB. Class A Preamp. Dual power supply; MC Head-amp.

A-7 Solid State Integrated Amplifier
65 watts per channel minimum RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.1% THD. Phono SNR 78 dB. Class A Preamp.

A-5 Solid State Integrated Amplifier
45 watts per channel, minimum RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.1% THD. Phono SNR 75 dB.

T-9 Quartz-Locked Solid State Tuner The only Quartz-Locked component tuner, featuring pinpoint, drift-free tuning. Dual gate MOSFET front end, 1.7 µV usable sensitivity, 5 µV 50 dB quieting, SNR 73 dB (mono), 65 dB (stereo), 40 dB separation.

T-4 Servo-Locked Solid State Tuner The only component tuner featuring Servo-Locked for driftless performance. 1.9 µV usable sensitivity, 35 µV 50 dB quieting SNR 70 dB (mono), 60 dB (stereo). 40 dB separation.

P-303 Solid State Stereo Preamplifier Dual line construction featuring Class A push-pull circuitry with no more than 0.06% THD, frequency response 3.5 Hz to 200 kHz, +0.05%, -1.5 dB. SNR 70 dB (MC), 83 dB (MM), Protective relay circuitry.

CIRCLE 33 ON READER-SERVICE CARD
Jeffrey Solow and Albert Dominguez: Cello/Piano Recital. Works by Barber, Kodaly, Dello Joio.
J. Strauss Ensemble of the Vienna SO.
Brian Sullivan: Operatic Recital. From radio broadcast of the late 40s and early 50s.

Peters International
André Bernard: Works for Trumpet and Strings (by Telemann, Purcell, Torelli, Stölzel). Ensemble Instrumental de France, Wallez.
Daniel Bourge: Two Centuries of French Works for Horn (by Dukas, D'Indy, Corrette, Saint-Saëns, Chabrier). Monte Carlo Opera O. Freccia.
Gregorian Chant: Christmas (Mass for Midnight; Mass for the Day). Solesmes Abbey, Gajard.
Gregorian Chant: Mass for the Dead; Offices for the Dead. Solesmes Abbey, Gajard.
Noël Provençal (Christmas Music of the 16th-18th Centuries from Provence). Les Musiciens de Provence.

Note: Quad releases are compatible QS discs.

Philips
Beethoven: Piano Sonatas Nos. 8, 14, 23, Dichter.
Beethoven: Symphonies (9). Concertgebouw O. Mengelberg.
Beethoven: Symphonies (9). London PO. Haitink (individual issues from set).
Beethoven: Symphony No. 2. Leonore Overture No. 3. BBC SO, C. Davis.
Liszt: Transcendental Etudes, Arrau.

Monteverdi: Modrighia, Book VII. Armstrong, Burrowes, Kern, S. Browne, A. Collins, Hodgson, Davies, Oliver, Luxon, Lloyd; English CO, Leppard.
Saint-Saëns: Symphony No. 3. Chorzempa: Rotterdam PO, De Waart.
Verdi: I due Foscari, Ricciarelli, Carreras, Cappuccilli, Ramey; Austrian RSO, Gardelli.

The overall sound quality of the Allison: Three was exceptionally clean and clear, with excellent definition. There were no signs of strain; distortion was very low, even at substantial power levels.

On our pure-tone tests, the Allison: Three proved to be one of the lowest-distortion bass reproducers that we’ve come across. There was no evidence of midrange or tweeter buzzing either.

In its price range, we’d match the Allison: Three with the best systems we’ve auditioned, and we wouldn’t hesitate to compare it favorably with many loudspeakers that are considerably more expensive.

All drivers are of Allison manufacture and appear exceptionally rugged.

We’d like to digress for a moment and comment on this manufacturer’s literature. Simply stated, it’s the best we’ve seen. Loudspeakers generally come with a paucity of information, and what there is of it is frequently “hyped.” This is hardly the case with Allison ... If we were to give a “consumer-protection” award to a speaker manufacturer, our candidate would be Allison Acoustics.

A reprint of the entire review and our informative product catalog are available on request.

ALLISON ACoustics
7 Tech Circle, Natick, Massachusetts 01760
CIRCLE 2 ON READER-SERVICE CARD

“Quintessence
Grieg: Piano Concerto. Liszt: Concerto No. 1. Wild; Royal PO, Leibowitz and Sargent.
Kachmannoff: Piano Concerto No. 3. Wild; Royal PO, Hornstein.
Wagner, Korngold: Orchestral Works. Royal PO, Hornstein.
Colin Davis Concert (works by Beethoven, Brahms, Mendelssohn, Wagner). Sinfonia of London.
Fiedler’s Favorite Concertos.
Virgil Fox: Organ Book.
Russian Showpieces (by Mussorgsky, Borodin, Rimsky-Korsakov, Gliebe). SO, Stokowski.

RCA Red Seal
RCA RED SEAL
Ibrahim: String Quartets (2). Guarneri Q; Zukerman.
Chopin: Piano Concerto No. 2. Ax; Philadelphia O. Ormandy.
Doppler, Krimberg: Flute Works. Rampal.
Elgar, Schumann: Cello Concertos. Harrell Levine.
Ibert, Reinecke: Flute Works. Rampal.
Discover music you’ve never heard before.

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But don't take our word for it. Visit your dealer and try the originals for yourself.

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Mendelssohn: Octet. Cleveland and Tokyo Qt.

Monteverdi: Orfeo. Tappi et al.; Lausanne Ensemble, Corboz.
Offenbach: La Péri. Crespin, Vanzo, Bastin; Strasbourg PO, Lombard.
Prokofiev: Symphony No. 5. Philadelphia O. Ormandy.
Rachmaninoff: Piano Concerto No. 3. Horowitz; N.Y. PSO, Ormandy.
Ravel: Piano Works Ax.
Stravinsky: Chamber Works. Tashii.
Tchaikovsky: Romeo and Juliet; Francesca da Rimini: Philadelphia O. Ormandy.
Verdi: Otello. Domingo, L. Price, Milnes; Levine.
Verdi: Requiem. L. Price, Baker, Luchetti. Van Dam; Chicago SO, Solti.
Villa-Lobos: Guitar Studies (12). IREAM.
Maurice André: Baroque Trumpet Concertos (two discs).
King's Singers.
Music from Ravelina. Chamber works featuring Levine, Harrell. Chicago SO members.
Jean-Pierre Rampal and Alexandre Logay: Live at Lincoln Center.

RCA GOLD SEAL
Handel: Messiah, Vvyyan, Sinclair, Vickers, Tozzi; Royal PO, Beecham.
Arthur Fiedler Evening at Pops (two discs). Plus additional releases to be determined.

RCA VICTROLA
Lotte Lehmann: Recital. Plus additional releases to be determined.

Repetoire Recording Society
Widor: Symphonie gothique; Symphonie rossini.
(All played by Rollin Smith.)

Seraphim

Beethoven: Piano Concerto No. 5. Soloist, Philharmonia O. Menges.
Britten: St. Nicolas. Tear, Russell: King's College Choir, Academy St. Martin. Willcocks.
Donizetti: Don Pasquale. Saraceni, Schipa, Poli, Badini: La Scala, Salabert.
Strauss, R. Tod und Verklarung, Till Eulenspiegel; Salome's Dance. Dresden State O. Kepe, M."
Conchita Supervia: Operatic Arias and Spanish Songs.

Serenus
Rihay: Music of, Vol. 3.
Korel Gott: Pop Star! Czech star sings in English.
Music by Friends of Meyer Kupferman.
Dwright Peltizer: Contemporary Piano Project (three discs).

1750 Arch Records
Brahms: Vocal Duets, Opp. 20, 61, 68. Granill-Williams, Barnhouse.
Debussy: Preludes, Book 1, J. Stark.
Downland: Lute Fantasies and Dances. Bacon.
Machaut: Music and poetry. Music for a While.
Prokofiev: Violin Sonata No. 1 et al. (includes works "rarely, if ever recorded"). Kobalke.

New Music for Electronic and Recorded Media by Women. By Beyer, Oliveros.
Greenham, et al.
Wondering in This Place (Eliabethan airs and lute works). Buckner, Bacon.

Sine Qua Non
Bach: Brandenburg Concertos; Orchestral Suites. Saar CO, Ristenpart.
Chopin: Piano Works. Various (three discs).
Mozart: Symphonies Nos. 31, 36, 38, 40, 41. Philharmonia Hungarica, Maag.
Stravinsky: Firebird, Petrushka; Sore du printemps. Ansermet.
Tchaikovsky: Nutcracker excerpts. PSO of London, Redzinska.
Russian Orchestral Works (three discs).

SON SUPERBA
Handel: Messiah. Hoagland, Gore, Living's, Evlitz; Handel and Haydn Society (Boston), Dunn.
American Brass Band Journal Revisited. Empire Brass Quintet et al.
Russian Brass (works by Ewald). Empire Brass Quintet.
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The goal of most receivers is to sound like a good receiver. But when we set out to build the Toshiba SA620, we set our goals a little higher:

To sound like a separate tuner and amplifier.

We started at the bottom.

We began by building an amplifier. An amplifier strong enough to drive even the biggest speakers. Without strain. Yet clean enough to keep distortion to a minimum.

An amplifier with 50 watts minimum RMS per channel (both driven into 8 ohms speakers, from 20Hz to 20kHz, and only 0.3% total harmonic distortion).

And when we were through we had a sound quality that virtually achieves the sound of separates. But we were still only half way there.

Our engineers topped themselves.

Using the latest advances in audio technology, Toshiba engineers developed a tuner with specs and features good enough to stand up to separates.

A special high density Toshiba PCT-type IC ensures high IF stage performance and reliability. While our three, two-element ceramic filters and six stages of amplification give razor-sharp selectivity. IHF sensitivity is rated at 1.8uV. Conservatively. Selectivity an impressive 65dB. And signal to noise ratio a super clean 70dB.

If we didn't tell you it was one unit, you wouldn't know it.

Since our receiver didn't sound like most other receivers, we decided it shouldn't look like them either.

So working closely with our engineers, Toshiba designers created our unique “double-decker” look.

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You can afford a Toshiba Tuner/Amplifier.

Since every music lover has different needs, we took everything we learned from the 620 and applied it to a whole line of Tuner/Amplifiers.

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TOSHIBA
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CIRCLE 45 ON READER-SERVICE CARD
SON MEET THE CLASSICS
Lives and Music of Bach, Beethoven, Chopin, and Mozart.
Life and Music of Joplin.
Supraphon
(distributed by Qualiton Records)
Beethoven: Archduke Trio. Suk Trio.
Brahms: Violin Concerto. Suk; Czech SO, Neumann.
Dvořák: Piano Works (complete). Kvalip.
Janáček: Sinfonie. Sluka: In the Name of Life.
Liszt: Années de pélerinage excerpts. Klíčník.
Martinů: Orchestral excerpts from operas.
Martinů: Rhapsody-Concerto. Two Violin Concerto. Simáček, Brož, Pospíšil; Prague SO, Slovák and Konvalinka.
Martinů: Rhapsody-Concerto. Two Violin Works. Snitíl, Zichová
Mozart: Piano Concertos Nos. 14, 23. Moračec, Czech CO.
Palestrina: Missa Hodie Christus natus est; Stabat Mater; Improperia. Czech Philharmonic Chorus, Veselka.
Smetana: Two Widows. Sormová, Machotová, Zahradníček, Horáček, Svehlová, Prager National Theater, Jilek.
Tchaikovsky: Symphony No. 4. Czech PO, Slovák.
Vivaldi: Four Seasons. Suk; Prague CO, Hlaváček.
Musical Treasures from Jakomíčké Castle.
Soloists: Prague Chamber Soloists.
Prague Madrigal Singers. Works by Martinů, Eben.
Spanish Music for Vihuela. Witoszynskyj, Lukas.
Jaroslav Vlčíček: Organ Recital. Works by Bach, Froberger.
Telarc
Bach: Gombó Sonatas. Meints, Orinstein.
Bach: Well-Tempered Clavier (complete).
Cleveland Baroque Soloists. Works by Telemann, Handel, Scarlatti.
Michael Murray: Organ Recital. Direct-to-disc recording.
Note: Telarc is the new classical label of Ad- vent Recording Corp. of Cleveland, Ohio. All previous Advent releases will remain available, but under the new name.

Turnabout
Berlin: Don Giovanni, Don Juan, Don Giovanni: orchestral excerpts; King Lear Overture. Philharmonia Hungarica, Kapp.
Briggs: Clarinet Quintet. Silfies, Korman, Beiler, Barnes, SántAmbrogio (St. Louis SO members).
Chopin: Etudes, Op. 10, 25; Scherzi; Ballade; Polonaise; Impromptus; Polonaise-Fantaisie; Barcarolle; Nocturnes; Impromptus; \*.
Haydn: Cello Concertos. Varga; Bamberg SO, Dorati.
Liszt: Works for piano and orchestra based on Schubert; Beethoven; Weber; Schott; Schubert. Fauser, Weber; Rose; Philharmonia Hungarica, Kapp.
Mozart: Symphonies Nos. 35, 39 North German RSO, Montossi.
Ravel: Piano Trio; Violin Sonate. O'Reilly, Lauder-Daly, Petit.
Weill: Mahagonny Songspiel; Dreigroschenmusik; Jerusalem SO, Foss; Foss: Music for Westchester SO, Landau.

TURNOUPH BISTORICAL SERIES
Beethoven: Symphony No. 2: Riunis of Athens. Royal PO, Beecham.
Rossini: William Tell; Cartier, Filippeschi, Taddei, Tozzi, Corea: RAI Turin, Rossi.
Strauss, R.: Don Juan; Tod and Verklärung.

VIENNA PO, Strauss.
Tchaikovsky: Piano Concerto No. 1: Liszt: Hungarian Fantasia; Solomon; Philharmonia Dobrovon and Suskind.
Alirio Diaz: Classic Spanish Guitar (two discs).

Unicorn (distributed by HNH Records)
Barber: Violin Concerto; Knoxville: Summer of 1915; Music for a Scene from Shelley. R. Thomas, violin; W. Australian SO, Measham.
Nielsen: Maskorode (sung in Danish). I. Hansen, Plesner, Landy, Johansen, Serensen, Bastian, Brodersen, Hiylgaard, Klint, Haugland, O. V. Hansen; Danish Radio, Frandsen.
B. Berg: Danish RSO, Caridis.
Vanguard
Brahms: Piano Quartets (3). A. Schneider, Towner, Parma, Brown.
VANGUARD TWOVERS
Art of Alfred Delier.
VANGUARD CARDINAL SERIES
Blocs: String Quartet No. 2. Musical Art Qt.
Cavalli, Monteverdi: VOCAL WORKS. Harper, Cutnod, English; Bath Festival, Leppard.

VANGUARD EVERYMAN CLASSICS
Beethoven: Creatures of Prometheus. Utah SO, Abravanel.
Haydn: Symphonies Nos. 44-49. Zagreb RSO, Janigro.
Janáček: Concertino; Youth; In the Mist. Melos Ensemble.
Sibelius: Symphonies (7). Utah SO, Abravanel.
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Schwann Record & Tape Guide

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Closing the Gaps in Phonograph Historiography

A New Edition and a Fresh Addition

Two book reviews by Robert Long


Were it not that the second edition is several years out of print, one would assume that most readers of High Fidelity own—or at least have read—this delightful and important history of the phonograph industry. In its own terms, and despite rumors of other works being readied to celebrate the current centennial, it remains unchallenged.

Not that it is without flaws or without companions. From Tin Foil to Stereo by Oliver Read and Walter L. Welch (whose second edition was reviewed in the October 1976 issue) is sometimes taken as competition, and partisans have debated hotly the relative merits of the two books. They are, in fact, entirely different in scale, intent, method, and—to a large extent—coverage. R&W deal in technology; Gelatt explores a medium for the dissemination of musical art and entertainment. R&W examine devices in elaborately documented detail; Gelatt tells the story of an industry, with the facts and figures to give it flesh but a minimum of the fussier trappings of research. R&W barely mention music; for Gelatt, music is at once the raison d'être and the apotheosis of the phonograph.

This corner of history, in which culture and enterprise are made partners, is one to which Gelatt seems passionately attached. He savors its story in anecdote, always judged and balanced in its handling of parallel or conflicting developments.

On this point, in particular, there has been argument on the ground that Edison's role in the story is brushed aside too lightly. A Gelatt apologist might point out that, when the first edition appeared, a corrective was required by the overweening, preemptive shadow that the Edison Legend had cast across this subject, among others. Such apology is necessary, however, only if one conceives of the book as a technical history of the phonograph—which, again, it is not. Edison's leadership was technical; for the artistic and business leadership to which we owe the present importance of the phonograph record we—and Gelatt—must look elsewhere.

But the technical elements in his story remain the least successful. The knowledgeable reader must, for example, exercise some charity when he comes to the "explanation" of stereo. Neither it nor the one-page exposition of quadraphony (Gelatt prefers "quadrphony," which is surprising in so literal an author) even hints how multiple channels are captured on disc in a single groove. To him, the means are irrelevant; that it can be done—that it was done—is enough.

These passages are included in the "new" part of the third edition. For the Postscript added in the second, Gelatt has substituted three chapters covering the introduction of stereo, the rise of rock, the sporadic challenges of tape to disc, and the conversion of the phonograph record from a specialty product to a mass-market one. The plates have been expanded, there are some changes in the illustrations within the text, and there are some rewordings—mostly to correct statements that have become anachronistic, though one change amplifies (still not entirely successfully; see notes at the end of "Recordings Before Edison," HF, January 1977) the knotty matter of Edison's "original" sketches for the phonograph.

It is a sad comment on our times that the price of the volume has risen more than 50% since the second edition, twelve years ago. We can only wince, consider what the cost will be by the time it reaches the fourth edition (it will; it must), and hurry to buy this one.

* * *


The "master" of His Master's Voice, in a sense, Fred Gaisberg. Tiny of frame, unprepossessing of face, an American in a world used to looking down its collective nose, both socially and culturally, at Americans, he was an unlikely candidate for heroism in his chosen field. But hero he is to anyone for whom phonographic achievement is a route to honor.

I hope I need not recount how he made his way up from unpromising beginnings as a boy, hammering out piano accompaniments (as "Professor Gaisberg") for early cylinder recordings in Washington, D.C.—via a period as ad hoc assistant to Emile Berliner—to become the world's first A&R man of note and the holder of a string of "firsts" that belongs in Guinness: first to record a genuine opera excerpt (with tenor Ferruccio Giannini); first to record Caruso, Patti, Chaliapin, and many other opera stars; first to make worldwide use of the recording horn in what we now call ethnomusicology; first, and perhaps the last, to publish a really significant memoir of the early years of recording (pace Joe Batten).

That memoir appeared in the early Forties, in England as Music on Record and in this country as The Music Goes Round. (One does not wonder that the American title's reference to a particularly banal popular song of the era was not duplicated abroad.) It was—and is—fascinating, but it also
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September 1977
is very frustrating to the would-be phonographic historian on two counts. First, Gaisberg was writing many years after the most important facts (albeit with the aid of contemporary diaries) and often jumped about in time in a way that, while not necessarily inappropriate for individual anecdotes or overviews, obscures the sequence of events. Second, he was so concerned with the phonograph and with the stars he recorded on it that the reader seldom has much of a glimpse of Gaisberg himself, particularly the protagonist, as opposed to the author.

Certain traits do come through. A man who was nothing if not political—even slick, when occasion demanded—Gaisberg obviously had the finesse to manipulate the great and the proud without appearing to do so. His love of music and his fascination with mechanics both were deep-rooted. But he was, if anything, even more fascinated by people. He was inquisitive, bold, and resourceful. He was, to put it succinctly, the right man for his job.

That he applied these qualities with humanity as well as flair can only be guessed at in his memoir, whose shortcomings have, at last, been set right by A Matter of Records. Jerrold Northrop Moore not only knows phonographic history (as, among other things, a contributor on the subject to Gramophone), but he has had access to Gaisberg’s diaries, to other unpublished manuscripts, and to surviving members of Gaisberg’s family.

Rather than write a conventional third-person narrative, Moore has helped Gaisberg to succeed where, left to his own devices, Gaisberg had failed: in telling his story with personality and a strong sense of organization. Page after page is taken up more with direct quotation (often from the memoir itself) than with Moore’s connective fabric. But the net impression on the reader is one of having experienced these scenes with Gaisberg, rather than—as in the earlier volume—of having listened in while an aging and rather garrulous man reminisces about things long past. So successful is Moore in this that he invites criticism on the ground that he did not do more of it. Now that we begin to see what sort of man Gaisberg really was, it only whets our appetite; instead of the delightful supper, we wish that he could have served up a banquet. How ungrateful we are!

Nor is A Matter of Records a replacement for Gaisberg’s own book. Despite all the quotations, the biography is profoundly different in method that it drastically rearranges Gaisberg’s emphases. While that is sometimes to the good (occasional passages in the original are, for example, little more than orgies of name-dropping), something does get lost.

Take the matter of the switch from Berliner’s original etched zinc masters to the vastly superior wax process. Gaisberg’s Chapter 3 is titled “From Zinc to Wax.” Typically—and anachronistically—he manages to work the names of Patti, Melba, Caruso, and Paderewski into the first sentence. He then goes on, through frequent digressions, to end the chapter with his account of the famous Caruso session in the Grande Hotel, Milan. But the thrust of the chapter is clear: Providence had dropped the wax technique and the great tenor into Gaisberg’s lap almost simultaneously; only together could the two have achieved their sudden glory.

Moore, by contrast, is four chapters and twenty-two pages farther into his narrative before he comes to the Caruso story. His account of it—again, largely in Gaisberg’s words, but quoting from both the published text and the family cache of manuscripts—makes much more sense of what happened. For one thing, he shows that Gaisberg’s negotiations with Caruso did not lead immediately to the recordings. In between, Gaisberg recorded the Sistine Chapel Choir, and, with it, the only castrato (Moreschi) by which modern ears can judge the male soprano voice for which so much important music was once written.

At the final Sistine Chapel session a battery that Gaisberg used (to drive the lathe?) ignited some cotton wool packing for the wax masters, which panicked the choir and resulted in burns for the recording crew (consisting at minimum of Gaisberg, his brother Will, and one of their Italian agents) before the flames were quelled. In a previously unpublished letter, Gaisberg remarks wryly: “Reuter’s cabled the incident over the world, featuring two Americans involved in the destruction of the Vatican by fire.” There is no hint of this Roman sojourn in his published version of the Caruso episode.

Nor does it include many of the details that Moore quotes from a manuscript entitled I Recorded Caruso. Among them, “... Dressed like a dandy, twirling a cane, Caruso sauntered down Via Manzoni and—to the delight of those worshippers of tenors, the waiters—entered the Grande Hotel ... where we were waiting for him,” is far more graphic and colorful than the original volume’s “... One sunny afternoon Caruso, debonair and fresh, sauntered into our studio....”

Yet when the account is over, Moore has barely mentioned the advent of wax masters. So it is only by comparing the two versions that the reader can adequately appreciate either if his purpose is to come by historical understanding. Still, as a narrative the Moore is clearly preferable. It is more self-sufficient, more complete, and more zestful. Paradoxically, it also is more representative of Gaisberg: we seem to hear his voice—the voice of a master in this curious profession that he created—for the first time unburdened of the self-consciousness and the faulty technique that can muffle some records of even the greatest recordist.
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My components include a McIntosh tuner-preamplifier, Model MX-112, and a McIntosh amplifier, Model MC-250. Several of the FM stations I like are within twenty-five miles, but one that I particularly like is about 100 miles away. For TV reception I use an antenna with an antenna amplifier and a four-way splitter. I get good reception from TV stations near the distant FM station. I would like to use one of my four antenna outputs for my near the distant FM station. 

I own a Technics SL-1500 turntable and tone arm. The 8750 is quartz-controlled and has a variable frequency for the tuning you specify and being "fine-tuned" for their particular arms and that random combinations may not give optimum results.

I own a Marantz Model 2270 stereo receiver and an old Knight-Kit tuner that incorporates tubes in its construction. While listening to an FM broadcast at 101 MHz on the Markovich, Whiting, Ind. 

I own a Marantz Model 2270 stereo receiver and an old Knight-Kit tuner that incorporates tubes in its construction. While listening to an FM broadcast at 101 MHz on the Marantz but the signal strength remains the same. The Knight isn't tied in to the Marantz. Can you offer some explanation as to what might be causing this phenomenon, and can it be harmful to the receiver?—M. J. Markovich, Whiting, Ind. 

I own a Technics SL-1500 turntable and a carbon-fiber tone arm and a carbon-fiber headshell. The carbon shell weighs 2 grams less than my shell. 

The rest of my system consists of an ESS preamp, Phase Linear 100B amp, and Speakerlab 7 speakers. I'm sure that anyone with equipment of this caliber will find the $8.00 well spent.—Paul E. Houston, Cincinnati, Ohio. 

What you have done seems reasonable. The "universal" headshells used by Sony, Technics and other manufacturers are in fact interchangeable, but certain of these companies caution that their headshells have been "fine-tuned" for their particular arms and that random combinations may not give optimum results.

I have a pair of Pioneer CS-77 speakers that were purchased in 1969. Would installation of acoustic lining into the cabinet be of any benefit? 

Also, a local record store that sells albums on prices at least $2.00 below those of other stores seems to have a disproportionate number of warped albums. Do major record labels sell such discs as seconds?—Steve Askew, Kirksville, Mo. 

It is likely that adding acoustic lining material to the enclosures of your Pioneer speakers would further damp the bass response and lower the efficiency of the system. To evaluate whether these changes would be desirable or even tolerable would require detailed knowledge of driver and system performance—no to mention considerable engineering expertise. If you decide to try the change, be sure you can return the system to its original condition in case you don't like the result. 

Assuming that the record dealer is using normal sources of supply, he does not have seconds, which are not, to our knowledge, sold by the industry.
WHY MOST CRITICS USE MAXELL TAPE TO EVALUATE TAPE RECORDERS.

Any critic who wants to do a completely fair and impartial test of a tape recorder is very fussy about the tape he uses.

Because a flawed tape can lead to some very misleading results.

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And if a cassette or 8-track introduces wow and flutter, it's apt to produce some test results that anyone can argue with.

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Digits on the Ivories

It evidently represented the dream of a lifetime. Joe Tushinsky—collector extraordinaire of piano rolls, one of the few musicians among today's chief executives in the audio industry (Superscope, Inc.), son of a musician (NBC Symphony, among other things), and the original U.S. importer of Sony tape equipment—unveiled the Pianocorder in Chicago's Playboy Mansion with a relish we doubt Hugh Hefner himself could have summoned up even for a Manon or a Cleopatra. Under the beaming eye of its benefactor, the Pianocorder, a small cassette deck plus a long black box that mates with the keyboard, sat down at the concert grand and played Paderewski's reading of the Chopin Military Polonaise. It then proceeded to reproduce the pianism of an amateur to whose playing it had been privy only the day before. Fifty years after its demise as a mechanical marvel, the player piano was back as a digital electromechanical one—with some significant new twists.

At the Pianocorder's commercial introduction, scheduled for early 1978, there will be two home versions: one with the separate "box" (or Vorsetzer, similar to the piano-playing mechanism that Welte and others offered in the early years of the century) to be placed over the keyboard, one with all the mechanics—a series of solenoids, one for each note and two for the pedals—built into the piano. Either can be attached to anything from the family upright to the grandest of grands. The built-in version (which will cost $1,250) includes two-way mechanics: Digital recordings can be made, as well as played, on the piano. The "box" version ($1,500), since it is not permanently affixed to the keyboard, will record only with additional attachments.

Both work in conjunction with a cassette transport (attached beneath the upper end of the keyboard), operating at 3/4 ips—a speed that can be varied by ±20% to alter tempo without affecting pitch or other musical properties. (Remember, the recordings are digitally encoded "cues" for the various solenoids, not conventional analogue recordings.) With C-90 cassettes, the longest Superscope recommends with the Pianocorder, playing time therefore runs up to 22 1/2 minutes per side.

Installation plus a library of 100 cassettes will be included in the purchase price of the Pianocorder. Tushinsky is planning to transfer his entire library—more than 15,000 piano rolls—to Pianocorder tapes. Thus Schnabel or Hoffmann or Rachmaninoff or Gershwin will be able to play your own piano, "live" in your living room. In addition, Superscope plans a major recording project built around today's pianists, using very sophisticated, precise Master Recording Pianos. (Imagine: Glenn Gould might play Bach on your Steinway with no grunted obbligato!)

Presumably the sophistication of the Master Recording Pianos will be proof against further development in the home models. For example, the home models control dynamics on an instant-by-instant basis, treating the lower and upper halves of the keyboard independently (follow ing the model of the finest piano-roll players). Keys played simultaneously in either half, however, are reproduced at a single volume level, which may be at any one of thirty-two steps in its dynamic range. The Master model, by contrast, keeps a record of the force with which each individual note is played, no matter how many are played simultaneously; it thus is capable of preserving dynamic subtleties that are beyond the reproduction capabilities of the present home models.

This suggests that future home models may answer the questions we raised when experimenting with the prototype, which seemed somewhat limited in dynamic range by comparison to, say, the live performances of a Horowitz and which offered no gradations of pedaling—only on and off. But this was a prototype, and an exciting one. Aside from the ability to let pianists of any era play "live" at any time (and we hear rumors of a project to digitalize from conventional recordings as well as piano rolls), and that of making your own instant "piano rolls," the advantages to students are obvious. Most important, however, this is the first electrical recording scheme we know of that is without any waveform distortion, noise, or wow and flutter: our dynamic and pedaling qualms aside, perfect fidelity.

FM Quad and the FCC

The FCC has voted to hold a public inquiry into the feasibility of setting a standard for quadriphonic broadcasting. Readers interested in seeing a standard set should write to: Docket 21310, Federal Communications Commission, 1919 M St. N.W., Washington, D.C. 20554. Letters must be received by September 15, 1977. Though CBS has petitioned the FCC on behalf of its SQ system and the National Quadriphonic Radio Committee of the EIA has put forward its discrete system for consideration, two others, H-Matrix and Sansui's QS, will be evaluated by the Commission as well.

IHF Exec Director Named

U.S. Pioneer's Bernie Mitchell, president of the Institute of High Fidelity, has announced the appointment of Robert L. Gur-Arie as executive director of the IHF. Gur-Arie most recently was director of marketing programs and trade shows for the International Council of Shopping Centers and has been associated with the trade industry for seventeen years. At a luncheon at the summer Consumer Electronics Show, Mitchell officially introduced Gur-Arie to members of the audio industry.
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A pretty picture—Seven new AM/FM stereo receivers.

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Each Nikko Audio receiver has AM/FM tuner, amplifier and preamplifier sections with advanced circuitry to keep signals crisp, clean, strong and steady. Each receiver is built to provide maximum reliability and dependability, too.

Take the NR 1415, for example. It's a veritable powerhouse—175 watts per channel (minimum RMS) both channels driven with an amazingly low THD of 0.045% at a rated power bandwidth of

15Hz to 20kHz into 8 ohms.

Among the features of the NR 1415 are Nikko's own dual VU meters, two phono inputs, auxiliary, tape and adapter inputs, mic mixing, normal and narrow IF band switching, triple tone controls, LED function indicator lights with circuit protection indicator, audio muting and three speaker switching.

The excitement continues through the line clear down to the NR 315, a superb, efficient unit that's an ideal basic receiver for a small stereo system, with 10 watts minimum RMS per channel, both channels driven into 8 ohms (40Hz to 20kHz), with no more than 0.08% THD.

In addition to providing sufficient clean power, all Nikko receivers have circuitry that includes PLL multiplexing, quadrature detectors and phase-linear ceramic filters.

So whether you want a big, powerful 'top-of-the-line' receiver or a small dependable unit for casual enjoyment—or something in between with the right features and the correct amount of power—check out the seven new Nikko Audio receivers.

The face of Nikko has changed, but its reputation for performance continues. In the meantime, if you're interested in "professional components"... read on.
The Nikko Audio professional group of stereo power amplifiers, preamps and a remarkable new FM thin-line tuner are truly in a class by themselves.

The Alpha I basic power amplifier and Beta I all FET preamplifier are classics of power and operational ease. Although they have been available for only a few months, they have already garnered "rave" comments from critics and consumers alike.

Following in this tradition is the new Alpha II power amp with a continuous power output of 110 watts* per channel, with no more than 0.03% THD, it even has a variable VU meter control for matching speaker efficiency. The matching Beta II preamp has four inputs, subsonic filter, audio muting, and extremely low THD and signal-to-noise ratio.

The "rock-steady" Alpha V "Class A" laboratory standard amplifier is shown in matte black. It delivers 100 watts* per channel, with no more than 0.06% THD. Performance is so pure that the Alpha V is the touchstone by which all other amplifiers will be tested.

The matching Beta V high voltage FET preamp, atop the Alpha V, is the last word in performance and reliability. It features 3-position mode switching, 5-tape position controls, adjustable impedance/capacitance controls and subsonic filter. THD is a low 0.01% at 1 volt.

Rounding out the expanded professional line is the thin-line Gamma I FM tuner. Its accuracy (1.8mV usable sensitivity), and features like IF band selectivity, enhance a product virtually unmatched by any other manufacturer.

The professional group from Nikko Audio—each product crafted to provide the utmost in performance and reliability.

*Minimum RMS, per channel, driven into 8 ohms from 20Hz to 20kHz.
Nikko's Mix and Match Components

The separate components series from Nikko Audio features two well-designed tuners and three integrated amps. New this year is the NA 550 integrated amplifier with 45 watts* per channel, with less than 0.05% THD.

Also new in the Nikko line is the NA 850 with 60 watts* per channel, and less than 0.05% THD. Both the NA 550 and NA 850 integrated amps have myriad features like responsive VU meters with variable control, 5-position tape control switch (for dubbing), speaker protection circuitry, and Nikko's exclusive circuit breakers. The NA 850 also features a subsonic filter and tone defeat.

The TRM 750 integrated amp, like all Nikko products, is a superb performer, from its quality features to its built-in reliability. The TRM 750 delivers 55 watts* per channel and no more than 0.15% THD.

Nikko's NT 850 AM/FM tuner is uncannily quiet and station grabbing. Normal and narrow IF circuitry provide high selectivity and low distortion while a front mounted multipath switch aids in reducing noise.

Last, but not least, is the FAM 450 AM/FM tuner. It's an established performer with excellent specifications and a typically modest Nikko price.

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*Minimum RMS per channel, both channels driven into 8 ohms from 20Hz to 20kHz.

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HiFi-Crostic No. 28
by William Petersen

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<tr>
<th>INPUT</th>
<th>OUTPUT</th>
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<tr>
<td>A. English composer (b. 1942) African Sanctus recorded by Philips</td>
<td>17 88 116 45 154 73 188 56</td>
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<tr>
<td>B. Groove</td>
<td>143 179 99</td>
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<tr>
<td>C. Leonard Bernstein’s 1944 musical (3 wds.)</td>
<td>144 2 102 132 174 95 160 192</td>
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<tr>
<td>D. James Fenimore Cooper’s Harvey Birch</td>
<td>80 106 203</td>
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<tr>
<td>E. Device to adjust an organ’s volume</td>
<td>206 137 101 23 182</td>
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<tr>
<td>F. Variations by D’Indy</td>
<td>17 175 20 128 34</td>
</tr>
<tr>
<td>G. Blues singer and guitarist (full professional name)</td>
<td>167 157 118 107 151 181 49</td>
</tr>
<tr>
<td>H. Country of Aida’s premiere</td>
<td>195 75 184 8 153</td>
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<tr>
<td>I. Of a performance, uneven, poorly rehearsed</td>
<td>67 112 146 25 172 90</td>
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<tr>
<td>J. d’Armandeau (1679–1695), Belgian cellist, member of Stradivarius Quartet</td>
<td>152 65 26 129</td>
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<tr>
<td>K. Enormous</td>
<td>30 110 141 185</td>
</tr>
<tr>
<td>L. Popular ensemble - “Desperato” recorded by Asylum</td>
<td>199 58 87 171 13 36</td>
</tr>
<tr>
<td>M. Tchaikovsky ballet (2 wds.)</td>
<td>83 139 5 157 122 46 191 187</td>
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<tr>
<td>N. See Word Z (3 wds.)</td>
<td>177 104 39 70 206 135 155 3</td>
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<tr>
<td>O. Pay particular attention to this (abbr.)</td>
<td>94 130 12 189 43 81 167</td>
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<tr>
<td>Q. Stringed instrument</td>
<td>147 121 93 33 159 51 134 100</td>
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<tr>
<td>R. Handel’s Chandos Anthem No. 2 (7 wds.)</td>
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</tr>
<tr>
<td>S. Edison, jazz trumpeter</td>
<td>138 50 76 148 29 200 4</td>
</tr>
<tr>
<td>T. Of a musical passage, hurried, agitated (it)</td>
<td>165 113 44 64 108</td>
</tr>
<tr>
<td>U. Popular songwriter “I’m in the Mood for Love”</td>
<td>60 166 71 7 131 194</td>
</tr>
<tr>
<td>V. The Duke</td>
<td>77 161 123 193 16 97 210 53</td>
</tr>
<tr>
<td>W. German composer (1739–96) piano sonatas recorded by Dinor</td>
<td>136</td>
</tr>
<tr>
<td>X. Nielsen’s Fourth Symphony</td>
<td>27 126 163 82 173 186</td>
</tr>
<tr>
<td>Y. Amsterdam Hall</td>
<td>37 183 202 85 11 96 69 169</td>
</tr>
<tr>
<td>Z. With Word N. successor to the Songwriters Protective Association (3 wds.)</td>
<td>55 145 32 162</td>
</tr>
</tbody>
</table>

Solution to last month’s HiFi-Crostic appears on page 8.
"Phono-cartridge performance has come a long way in recent years, as can be judged from the 2000Z's measured frequency response. Including the effect of arm resonance in a typical tone arm, and combining the measurements from a couple of records, the response could honestly be described as ±1 dB from 15 to 20,000 Hz. This is comparable to the flatness of most amplifiers, especially if the tone controls cannot be bypassed."

"Finally the light dawned: This is a neutral cartridge — it's supposed to sound that way. The highs are not subdued; they are just smooth, rather than peaky and shrill. Instrumental timbres are reproduced in fine detail, but without being artificially pointed up. Thus one is able to hear soft inner voices and pastel shadings that are all but obscured by the bravura of some of the competition."

"The Empire 2000Z is truly impressive. It is well worth auditioning, even though that can't be done in a hurry if you are to hear — and savor — its quality.

"The Empire 2000Z offers extremely smooth response in the audible range and, even at the light tracking force (1.0 grams) at which our listening tests were conducted, never failed to track the grooves of even our most dynamically recorded musical test passages. Highs were silky smooth, never 'edgy' or raspy and there was not even a hint of 'peakiness' in the important 12,000 to 16,000 Hz range where so many other pickups often add distinct and easily identifiable coloration."

"Frequency response was among the smoothest we have ever recorded for a stereo cartridge and actually did not deviate more than the plus or minus 1 dB specified over the entire audio spectrum. Resonance has been pushed way out beyond the audio range and we suspect that some of the stylus engineering developed for Empire's CD-4 (4000 series) cartridges has been brought to bear in this design to accomplish that feat."

In the graph frequency response was measured using the CBS 100 Test Record, which sweeps from 20-20,000 Hz. The vertical tracking force was set at one gram. Nominal system capacitance was calibrated to be 300 picofarads and the standard 47K ohm resistance was maintained throughout testing. The upper curves represent the frequency response of the right (black) and left (gray) channels. The distance between the upper and lower curves represents separation between the channels in decibels. The inset oscilloscope photo exhibits the cartridge's response to a recorded 1000 Hz square wave indicating its resonant and transient response.

For more information on the Empire 2000Z, and our free brochure "How to Get the Most Out of Your Records," write: Empire Scientific Corp., Department 12, 1055 Stewart Avenue, Garden City, N.Y. 11530.

CIRCLE 12 ON READER-SERVICE CARD
Crown's "Synergistic" Equalizer


Comment: The Crown EQ-2 provides a novel approach to truly effective room and speaker equalization. It is an eleven-band equalizer with a nominal center every octave from 20 Hz to 20 kHz. The filters are one-half octave wide (rather than the more common full octave), and the center frequency of each filter is separately adjustable over a range approaching one octave. This delivers finer control over individual portions of the band and less interaction between the filters than one usually gets in such a unit. Each slider provides up to 15 dB of boost or cut (adjusted with a calibrated, switched attenuator) at its center frequency. For even finer resolution, the two channels of the EQ-2 can be interconnected on the rear panel to produce a twenty-two-band mono equalizer.

In addition to the individual equalizer sections, the system incorporates shelving-type bass and treble tone controls (with slopes of 6 dB per octave) for each of the stereo channels. The inclusion of these controls in the same package with the equalizer gives rise to the "synergistic" description of the Crown EQ-2. Each of the tone controls can be set for up to 20 dB of boost or cut on the shelf, and the turnover point of each is continuously adjustable: between 180 and 1,800 Hz for the bass controls, between 1 and 10 kHz for the treble.

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested, neither HIGH FIDELITY nor CBS Technology Center assumes responsibility for product performance or quality.
Front panel LEDs (one per channel) flash whenever an overload condition occurs at any of four critical points in the circuitry. Either a unity or a 10 dB gain can be selected by a rear panel switch, with additional screwdriver adjustments for finer settings. Both unbalanced (pin) and balanced (phone) inputs and outputs are provided to interface with either audiophile or professional gear. The graphic equalizer and tone control circuits can be separately bypassed on each channel for A/B comparison of equalized with unequalized sound.

There should be no difficulty whatsoever interfacing the Crown with other equipment. Output clipping does not occur below the 10 volt level, and even then total harmonic distortion is minuscule. At 2.5 volts output—all we’d ever expect to need—the highest level of THD is on the order of 0.005%. In a worst case test, with the 40 Hz control set flat and all others fully boosted, THD jumps all the way to 0.006%; clearly there’s no need to worry here. Intermodulation distortion is a mere 0.002%.

One point on which we are adamant: An equalizer must change only what it is told to change; it must have no mind of its own. Here the Crown rates superlatives. Frequency response is flat from 10 Hz to beyond 40 kHz—and only ½ dB down at 100 kHz! When it is set for flat response, we find no audible difference when the EQ-2 is switched in and out of the system. The CBS data show that the available boost and cut are just as claimed and that the calibration of the tone control turnover points is reasonably accurate. Adjusting the center of an octave band to an extreme of its frequency range, however, diminishes its boost or cut range by 3 to 4 dB.

The essence of an equalizer is elusive. Unlike most components, it is expected to change the signal passing through it in a fairly radical way. We put the EQ-2 through its paces taking the rough edges off a speaker—a relatively flat one, at that—in our listening room. Using a sound level meter, set up at our normal listening position, and the Crown Equalization Test Record provided with the EQ-2, we plotted the response of one of the speakers on the graph paper (also included). Over all, the response was within ±6½ dB from 25 Hz to 12.5 kHz, exhibiting a very gradual slope above 2.5 kHz and a more rapid drop above 10 kHz. On the low end, the response sloped off gradually below 150 Hz with relative standing wave peaks at 40 and 80 Hz and a trough in between. There was a slight (3 dB) prominence at 1 kHz.

As a first corrective measure, we used the bass tone control to bring up the low end. We set the bass turnover as low as we could (180 Hz) and cranked the extreme low end up by about 10 dB. The average low end was now even with the midband, but the standing wave pattern was still apparent and the high end still sloped off. This brought us to within ±3 dB from 23 Hz to 4 kHz. We next set the filter switches as follows: -4 dB at 40 Hz, + 2 dB at 80 Hz, -3 dB at 160 Hz, 0 dB at 320 and 640 Hz, -3 dB at 1.25 kHz, +1 dB at 2.5 kHz, and + 4 dB at 5 kHz. We shifted the 10-kHz filter down a bit in frequency and set it for + 4 dB. Then we moved the frequency of the 20-kHz filter down through about half of its range and set it for + 3 dB. (We concur with Crown’s observation that realistic evocation of a listening position part way back in a concert hall requires a response that slopes off somewhat above 9 kHz.)

We were then within ±2½ dB from 24 Hz to 9½ kHz, and the appearance of the curve was much smoother. Still, there was a slight dip in the 63 Hz region, a prominence at 80 Hz, and another at 4 kHz. We moved the 80 Hz filter down to the 60 Hz area and cut its boost from +2 to +1. Then we moved the 5 kHz filter out toward 10 kHz and cut its boost from +4 to +3. A final check indicated that we were within ±1½ dB from 24 Hz to 9.5 kHz with the desired rolloff above that point. We repeated our procedure on the other channel.

The results were extremely gratifying. Although the system gave little cause for complaint before equalization, the improvement in bass response was outstanding. There was no sign of boom or “mushy” bass—just utter realism in the reproduction of bass drum, organ, bass violin, and such. The improvement in the high end was less obvious, but there was a definite increase in clarity and it was easier to distinguish between instruments, no doubt because of the more accurate reproduction of each instrument’s spectrum.

We hesitate to say that the Crown EQ-2 is a panacea, but we could not have achieved the results we did with an ordinary graphic equalizer. (We couldn’t have done without the sound level meter either, but Crown dealers who carry the EQ-2 can make one available for setup.) Had our speakers’ response really been ragged, it’s doubtful we would have had a final outcome quite as good. And, without a speaker that can take the extra power in the boost regions without distorting, and an amplifier that can deliver that power, we would have been stymied.

Note that we were not able to extend the bandpass of the speaker very far below its natural rolloff point, for this is just where a woofer—any woofer—begins to rumble. (for which a subsonic filter may be useful in any case).

Interestingly, we find that we listen to the equalized system at a lower sound pressure level than we had prior to equalization. Evidently, we had a tendency to crank up the volume to make the bass more audible. Equalized, there’s no need to do so—and this probably helps us with respect to rumble as well.

CIRCLE 135 ON READER-SERVICE CARD
A Superb Amplifier from Sansui


Comment: Power amps are rarely birds of beauty. They have few (or no) controls to engross the eye and just sit there as unadorned hulks of potential power waiting to be unleashed into your speakers. Sansui's BA-2000 certainly creates the visual image of latent energy—an image accentuated by the eerie green glow emanating from its large (3½-inch) output meters.

Dual scales, calibrated in watts and dB, indicate the effective power being delivered to an 8-ohm load. Calibrations run from a low of 0.05 watt (−13 dBW) to the rated 110 watts (20½ dBW), with levels above that shown in red. The corresponding dB range runs from −34 to +3 with the zero reference at 110 watts. A set of three buttons controls the meter sensitivity in 10:1 steps, giving effective calibration down to 0.0005 watt (−33 dBW).

The front panel also holds a dual-color POWER PROTECTOR indicator, which glows red for a few seconds after the power is applied—or whenever the internal protective circuitry is activated. In normal operation the color is a comforting green. A pair of pin-type input jacks, one set of spring-loaded speaker outputs (accepting bared or tinned wires), a fuse, and a ground plug make up the rear panel complement.

Readers occasionally appear to consider lab data a substitute for critical listening. This hardly is the case. Equipment—particularly an amplifier—that fares poorly in the laboratory almost invariably reveals its imperfections in the listening room if you know what to listen for. Indeed, that is one of the major reasons for conducting technical tests. But occasionally critical listening tests do show up sonic imperfections that were not uncovered in the laboratory—a good reason for audition. The human ear and brain together are a marvelous critical tool. We may react to subtle differences in sound character without ever being able to put our finger on just what they are.

As for the Sansui BA-2000, the data from CBS Technology Center reveal extraordinarily fine performance. The distortion components at any power level are practically nonexistent. It is hard to imagine how any human could hear 0.003% THD—harmonics some 90 dB below the fundamental. The noise floor is even further down, at some 110 dB below full output, or barely over a billionth of a watt. The frequency response is virtually ruler-flat over what is generally considered to be the range of human hearing: a mere ¾ dB down at 20 Hz and 20 kHz and only 1½ dB down at 100 kHz. The square-wave response approaches perfection, which testifies to excellent phase linearity, and the damping factor is sufficiently high; to have it higher would be to gild the lily (and perhaps to increase the transient intermodulation).

Clearly, the Sansui BA-2000 is about as close to the ideal as one can measure. Do these technological "virtues" show up in listening? You bet they do! This amplifier is utterly clean, transparent, and quiet. It just isn't there. As far as we can tell, it is like an optically perfect magnifying lens. The lower registers are extremely tight—indicating good speaker damping—while the transient response is ex-

Square-wave response
traordinary. To what can we attribute this sonic excellence? The Sansui literature would lead us to believe that it is the three-stage Darlington-configuration output stage, driven by a high-gain, high-slew-rate front end using a two-transistor "current mirror." Well, perhaps. Frankly, we don't care: The excellence is there.

CIRCLE 133 ON READER-SERVICE CARD

One of Satin's Super Pickups


Comment: When we reviewed our first Satin cartridge, the M-117X (November 1976), and became acquainted with the "new breed" of moving coil designs, we were a bit surprised and curious on learning that Satin has an even more sophisticated series of cartridges with still higher prices. (These new-breed designs have solved most of the problems traditionally associated with moving-coil pickups—

with the exception of price, which is still up there.) The M-18X, which feeds a normal phono input directly, is the next-to-top member of this super-series and has an improved electromechanical assembly and a replaceable Shibata stylus.

One characteristic of Satin cartridges that tends to distinguish them from similar competing designs is their unusually low range of tracking forces. The M-18X is rated at 0.5 to 1.5 grams, which the data from CBS labs show to be just a trifle optimistic. On the basis of the "obstacle course" test, we would call 1 gram, -0.1, +0.5 gram, a more realistic rating. The lab was able to carry out the balance of the test at 1.0 gram—low enough for any practical
necessity and extremely low for a moving-coil cartridge.

Somehow, the physical parameters responsible for the extraordinary sound of moving-coil designs continue to elude detection by laboratory instruments, for, while the measurements of the Satin M-18X are nothing to sneeze at, they are not at all unusual. Second harmonic distortion is a little better than average, and IM distortion, somewhat surprisingly, measures higher than in the M-117X. Frequency response is commendably flat through the midrange, shelving downward by 1 dB between 30 and 40 Hz and showing evidence of a high-frequency peak that reaches +6 dB at 20 kHz. Since this peak apparently results from the mass of the stylus tip resonating with the compliance of the disc vinyl, its measure depends also on the test disc and is somewhat equivocal. As we shall see, it can be dealt with rather easily.

Interchannel crosstalk is low enough that the effect of the M-18X on the separation of program material is negligible. From one end of the audio band to the other, separation is on the order of 20 dB or better. The low-frequency resonance in the SME arm is 7.7 Hz, which is unusually low for a moving-coil pickup and indicative of high compliance in the cantilever suspension. It also suggests that the cartridge will perform best with a fairly light tone arm. In the tracking-level tests, the maximum levels were negotiated with a 30-ohm load, with no effort to mask the region. It would overstate the case to say that the pickup needs the damping, but to pay a premium for the smoothness of the midrange yet more apparent, probably through the attenuation of spurious components that tend to mask that region. It would overstate the case to say that the pickup needs the damping, but to pay a premium price and give up any smidgen of performance for the improvement that the pickup makes. And without a doubt, it makes an improvement. Whether the difference is worth the cost is an individual decision. For us the cartridge makes music sound just beautiful.

We began our listening tests a bit skeptically, wondering what possible difference this unit could make in the sound of a system in order to justify its price. But the differences are there, even if they are subtle. The reputed clarity of moving-coil cartridges is here taken for granted rather than flaunted, resulting in a sound that is extremely smooth—satin, if you will. This is done without sacrificing details; it is simply that they are not given undue emphasis either.

If the over-all smoothness is disturbed in any way, it is by a slight high-frequency overemphasis that lurks in the background like the subliminal leer of a Cheshire cat. It is to the credit of the Satin that this is disturbing at all, the inherent roughness of most cartridges usually obscures an effect of this type. Best of all, however, when the cartridge is played through the Satin damping adapter (available for about $25), the brightness seems rather benevolent. The adapter contains a switched network that loads the cartridge with 100 ohms per channel, reducing output by about 2½ dB (which is easily spared) and significantly reducing the excess brightness. Once again the lab data tend to cloud the issue, for even when loaded with 30 ohms per channel the pickup shows no frequency-response difference that would account for the improved sound. Beyond the obvious effect on the highs, the damping makes the smoothness of the midrange yet more apparent, probably through the attenuation of spurious components that tend to mask that region. It would overstate the case to say that the pickup needs the damping, but to pay a premium price and give up any smidgen of performance for the want of an inexpensive accessory seems like false economy to us.

Clearly, the M-18X will appeal chiefly to perfectionists who have equipment capable of preserving the improvement that the pickup makes. And without a doubt, it makes an improvement. Whether the difference is worth the cost is an individual decision. For us the cartridge makes music sound just beautiful.

Manufacturer's Comment

We invite rebuttal from those who produce the equipment we review. The comments printed here are culled from those responses.

Jennings Research Vector I (June 1977): Your observations ascribing the exceptional stereo imaging to the fact that the loudspeaker is linear phase coherent are correct, but an in-depth look can provide insights as to why.

The woofer and tweeter are aligned so that, from the front, their acoustic position in space is the same. This allows identical arrival times from both drivers. Ordinary cabinet diffractions can, in most cases, cause additional late signal arrivals. i.e., the diffracted signal reaches the listener sometime after the original signal, which causes poor stereo imaging. By placing the high-frequency driver in a shallow well of acoustically absorbent foam, we minimize such cabinet diffractions.

Robert Young
Director of Engineering
Jennings Research, Inc.
A "Separate-Looking" Receiver from Toshiba


Comment: The Toshiba SA-420 gives the appearance of a low-profile FM tuner perched comfortably atop an integrated amplifier of similar dimensions, the two sharing a brushed-gold styling of sophisticated luxury. But a quick peek through the vent in the top of the case dispels the vision: Inside is a receiver of fairly standard construction. In providing such a showy exterior for a relatively low-priced receiver, Toshiba has added a decided plus. Is too much performance traded away to achieve it? As the lab data show, some compromises have been made, and your appreciation of the total package will depend to some extent on how excited you can get over a pretty face.

Toshiba recently revised the power rating of the SA-420 upward from 13 to 14 dBW (20 to 25 watts). The data supplied to the CBS Technology Center gave the lower rating, which therefore was used as the basis for testing. Total harmonic distortion data taken 1 dB below the new "full output" plus the intermodulation data suggest jointly that this receiver will indeed produce its rated power without excess distortion.

The damping factor of 27, which is somewhat low, is equivalent to an output impedance of 0.3 ohm at 1 kHz with an 8-ohm load. Speaker designers usually assume that amplifiers have negligible output impedance, and this value, while small, is enough to affect the behavior of at least some woofers. The most accurate results will probably be had by using the Toshiba to drive a somewhat overdamped speaker system to which it is connected by heavy-gauge wire—though the screw-type speaker terminals on the back panel appear to be engineered with lighter-gauge wire in mind. (Similar terminals are used for antenna connections: 300-ohm and 75-ohm FM, long-wire AM. The single back-panel AC outlet is not switched by the POWER/SPEAKERS knob.)

With a signal-to-noise ratio equivalent to 79 3/4 dB re a nominal 10-millivolt input, the phono section displays performance that is unusually good in a receiver of this class. The overload point, 150 millivolts at 1 kHz, is perfectly adequate. The RIAA equalization departs from flat by 1 to 1 1/2 dB in our test sample, which does seem to color the sound a bit, although some of the slightly tubby midbass (roughly 100 to 700 Hz) that we heard in our listening tests probably can be attributed to the low damping factor interacting with our speakers.

The control section sports a solid array of features, including dual tape monitors with dubbing capability in one direction. The characteristics of the tone controls seem quite reasonable, and the maximum treble boost seems intentionally limited to avoid instability problems at high and ultrasonic frequencies. (Oddly, Toshiba has seen fit to mount the balance control next to the tone controls rather than near the VOLUME, where it would seem to belong.) Filter slopes (at 6 dB per octave) are not as steep as some, but they are modestly effective. The loudness response seems well judged. The POWER switch is forced to share a knob with the speaker selector, which means that the "A" output terminals (to which most users would connect their main speakers) are on line as soon as the unit is turned on—or no consequence unless the switch is flipped on, then off, then on again. That sequence will sock the speakers with an appreciable pulse of energy.

The tuner section is, in its design and manufacture, complementary to the other functional blocks. As with most FM sections these days, its 30-dB quieting point is within a few dB of the theoretical minimum. The curves slope impressively from there, reaching 50 dB of noise quieting at just beyond 13 dBf in mono and at 38 dBf in stereo. At levels of 65 dBf and above, there is evidence of rising distortion, suggesting that the front end might benefit from the use of an antenna attenuator in really strong-signal areas.

Of the remaining tuner specifications, capture ratio and total harmonic distortion can be characterized as excellent; alternate-channel selectivity is adequate for most signal environments. Suppression of the 19-kHz stereo pilot (and 38-kHz subcarrier) is not a strong point, so the filter provided in Dolby-equipped cassette decks should be used when recording off the air. The frequency response has obvious departures from flat, resulting in a sound that is quite acceptable but not particularly accurate. Separation is adequate or better all across the band.

Though the styling makes a promise the electronics do
not quite redeem, this is not at all a bad receiver. It represents far better value than most of what is available on the compact market, for example. It is not as good as it might have been, given the resourcefulness of Toshiba's engineers—but that is judging by what they have accomplished on an obviously limited budget.

Toshiba SA-420 Receiver Additional Data

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<thead>
<tr>
<th>Capture ratio</th>
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<td>Alternate-channel selectivity</td>
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<td>38-kHz subcarrier</td>
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<td>Frequency response</td>
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<tr>
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Amplifier Section

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<tr>
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<tr>
<td>Frequency response</td>
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<td>±½ dB, 10 Hz to 50 kHz</td>
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<td>±1½ dB, 30 Hz to 15 kHz</td>
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<td>Damping factor at 1 kHz</td>
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<td>Low filter</td>
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Ditton 66: A Sweet-Sounding Speaker


Comment: As an eminent engineer once commented: "Don't confuse me with the facts. Does it sound good?" If "good" be "musical," the Celestion Ditton 66 does sound good, at least to our ears. It is an eminently sweet, clean speaker with a rich, warm bass and an extended (but not so) treble. Driven with sufficient power, it will produce a prodigious sound level—especially in the lower depths—and do it cleanly, as tests at CBS Technology Center bear witness.

Although the efficiency of the Ditton 66 is about 3 1/2 dB below what we have come to consider average—CBS reports an on-axis sound pressure level of 83 1/2 dB at 1 meter from a 0-dBW noise input, 250 Hz to 6 kHz—it is an easy speaker to drive. The impedance curve is relatively smooth and well contained. Except for a 22.5-ohm peak at resonance (49 Hz), the load stays between 4 and 10.5 ohms throughout the audio band. We rate the impedance as 4.6 ohms (the minimum reached just above resonance), but over the important midrange the curve averages about 2 ohms higher: low, but not so low as to be power hungry. Power is the staff of life for the Ditton, which easily handles a full 20 dBW (100 watts) at 300 Hz, producing a very high 108 dB SPL at 1 meter with a mere 2.3% combined second and third harmonic content. On a pulsed basis, the Ditton 66 swallowed the full drive capability of the lab's power amp without signs of overload, producing a whopping 116 1/2 dB SPL. At more reasonable levels—say, 85 dB and below—distortion is less than 0.3% for 80-Hz signals and less than 0.4% at 300 Hz. Even at 95 dB SPL, 80-Hz distortion is less than 0.4%; at 300 Hz, the harmonic content is less than 0.5%. In short, it is one of the cleanest high-level bass reproducers we've come across.

Measurements in the anechoic chamber indicate an over-all average omnidirectional response within ± 6 dB from 40 Hz to 16 kHz except for a trough in the octave centered on 4 kHz. (In that region the level is 10 dB below nominal.) Below 48 Hz the response falls off rapidly: at about 18 dB per octave. (The Ditton 66 uses a 12-inch woofer and 12-inch flat passive radiator in its tuned-cabinet design.) But there is another way to interpret the data. The response in the "fundamental" region between 50 and 800 Hz is quite uniform (within ± 2 dB), as is that in the "overtone" region between 2.5 and 16 kHz (within ± 2 1/2 dB). Between the two areas the curves shelve off so that the overtone region averages, perhaps, about 9 dB below the fundamental region. This interpretation corresponds more closely to what our ears tell us is happening.

Triangles, bells, and such, which have their energy concentrated almost exclusively at the higher frequencies, are reproduced very well, albeit perhaps not quite in perfect loudness balance with the rest of the orchestra. In listening tests, the reduced relative high-end response shows up mainly as a lack of sparkle and a transient response that, though fairly good, is not up to the best we've heard. On the other hand, that same characteristic lends a sweetness to the sound that is quite appealing. There is no trace of harshness or hiss, and yet the highs are indeed there—right out to at least 16 kHz.

There are no controls for the midrange or tweeter, so equalizing the system comes down to touchups with the preamp's tone controls. We found that a slight boost in the treble helps to restore the sparkle to the high end and improves the apparent transient response. A slight cut in the bass also helps the balance, but we achieved a greater improvement by moving the speakers away from reflecting walls and out into the room.

The dispersion of the midrange and tweeter is especially good. They are both mounted high enough above the floor to clear typical furniture, so a good fraction of the sound you hear is the so-called "direct wave." This probably helps create the outstanding stereo imagery of the Ditton system. The image has excellent depth and width, and with a good disc it is hard to tell that the sound is emanating from the speaker itself. Very satisfying.

Although a 17-dBW (50 watts per channel) amp will produce a sound level that will satisfy most listeners, the Ditton 66s will easily handle much more. When suitably driven, we expect they are capable of producing realistic listening levels in even the largest rooms. One caution, however: At subsonic frequencies, generated by record warps and lead-in grooves, the woofer and drone cone motion become quite violent—to the point of introducing chirps into the sound. So to get the low-distortion performance of which the system is capable, a subsonic filter is a must, especially if you're using a powerful amp.

The speaker projects its personality into the music, but that personality is restrained—even a little somber and serious. If warmth and sweetness of sound are, for you, among the cardinal musical virtues, you will probably enjoy the Ditton 66.
V-15 Type III... critics called the Type III the finest cartridge ever when it was introduced. The ultimate test, however, has been time. The V-15's engineering innovations, the uniform quality, and superb performance remain unsurpassed by any other cartridge on the market today. 3/4 to 1-1/4 gram tracking force.

M75ED Type 2... excellent trackability at a lesser price. The M75ED Type 2 features a built-in snap-down stylus guard and a smooth 20 to 20,000 Hz frequency response. 3/4 to 1-1/2 gram tracking force.

M24H... the cartridge that does not compromise stereo reproduction to add four-channel capability. Superb stereo trackability and quadrophonic carrier signal retrieval. New hyperbolic stylus tip, high energy magnet, and low-loss laminated electromagnetic structure. 1 to 1-1/2 gram tracking force.

M95ED... second only to the V-15 Type III in stereo reproduction. A thinner, uninterrupted pole piece minimizes magnetic losses. Its 20 to 20,000 Hz response remains essentially flat across the entire frequency range for excellent sound quality. 3/4 to 1-1/2 gram tracking force.

M24H... the cartridge that does not compromise stereo reproduction to add four-channel capability. Superb stereo trackability and quadrophonic carrier signal retrieval. New hyperbolic stylus tip, high energy magnet, and low-loss laminated electromagnetic structure. 1 to 1-1/2 gram tracking force.

M7011... the easiest way to upgrade your hi-fi stereo system without straining your budget. DOSically flat response is comparable to other brand cartridges costing twice as much. 1-1/2 to 3 gram tracking force.

M3D... the original famous Shure Stereo Dynetik® Cartridge. The M3D provides extremely musical and transparent sound at a rock bottom price. 3 to 6 gram tracking force.

The People's Choice-World-wide.

From Singapore to London to New York, Shure hi-fi pickup cartridges outsell every other brand — according to independent surveys. And for good reason: Shure cartridges, no matter where they're purchased, are guaranteed to meet the exacting published specifications that have made them the Critics' Choice in every price category.

CIRCLE 39 ON READER-SERVICE CARD
Regardless of what you may have heard, neither the amplifier nor the amperes had anything to do with the naming of the Ampex Corporation. Rather, the name was coined by Alexander M. Poniatoff, who combined his own initials with ex to symbolize the philosophy of excellence behind his products.

When he founded Ampex, Poniatoff was fifty-two and far removed from his beginnings in Russia. He had been educated in mechanical and electrical engineering in his homeland. Further studies in Karlsruhe were interrupted when the Russians declared war on Germany in 1914; after managing to get back home, he saw action as a pilot. In 1920, as the civil war drew to a close, he left Russia permanently.

For a time he worked in Shanghai designing electrical power stations, and finally he came to the U.S. landing in San Francisco in 1927. He had been educated in mechanical and electrical engineering in his homeland. Further studies in Karlsruhe were interrupted when the Russians declared war on Germany in 1914; after managing to get back home, he saw action as a pilot. In 1920, as the civil war drew to a close, he left Russia permanently.

The tour ended in Schenectady, New York, where—armed with a letter of introduction to General Electric—he was hired by GE as an engineer. A year later, by then with two patents in his name, he was assigned as project engineer on the development of a new type of circuit breaker. Hesitant because the job seemed too difficult for him, he asked his department head why he had been chosen rather than someone with more experience. He was told, "Experienced engineers already know that it cannot be done. You are not smart enough yet to know it is impossible." And Poniatoff proceeded to prove that the project was possible.

In 1930, ready to return to the West Coast, he joined the Pacific Gas and Electric Company. His real interest was in the development of new products, but the Great Depression made budgets for research and development sparse. Then, in 1940, he met Irving Moseley, who ran Dalmo Victor, a company developing small electrical appliances. Heartened by Moseley's attitude, Poniatoff went to work for him—offering his first three months' service without pay. He succeeded in improving the company's permanent-wave machine by eliminating its interference with the air waves and making its hair waves more permanent. This earned him another patent and additional income.

When Dalmo Victor lost a patent suit over an electric razor it had marketed, it cut back on its developmental work to reduce expenses, and Poniatoff left. He served brief stints with Pacific Gas again and with Westinghouse in Sunnyvale, but in 1942 he was invited to return to Dalmo Victor. The company had received a wartime contract to develop Navy airborne radar scanners. A prototype had to be ready in a hundred days. This was the kind of challenge he liked. "The project group went without shaving for days," he recalls. "The working hours were from 7 in the morning until 11 at night."

Moseley suggested that Poniatoff form his own manufacturing company to supply the hard-to-find sophisticated motors and generators needed for the radar system. And so on November 1, 1944, the Ampex Electric and Manufacturing Company started operations in an abandoned furniture loft above the Dalmo Victor plant in San Carlos. Ampex thrived until, at the war's end, the Navy canceled all of its contracts. Despite advice to dissolve the company, Poniatoff kept it together and found a major customer for high-quality motors to be used in furnaces.

What happened soon after represented one of those historical confluences that prompt ruminations about fate. Poniatoff, a longtime classical music lover, was growing interested in the possibility of developing and manufacturing amplifiers and speakers. His enthusiasm for high fidelity sound was shared by one of his staff members, G. Forrest Smith, and the smoldering interest was fanned into flame by a young engineer named Jack Mullin.

At the end of World War II, Mullin, a Signal Corps officer, discovered a Magnetophon tape recorder (made by Telefunken) in an occupied German radio station. He managed to transport two of the recorders home, and in 1946 he demonstrated one at a meeting of the Institute of Radio Engineers in San Francisco, his home town. [See "Creating the Craft of Tape Recording" by Mullin, HF, April 1976.] Present at the meeting was a friend of Smith's, engineer Harold Lindsay of Dalmo Victor, who was fascinated by the tape machine. The two men discussed, rather dreamily, the potential of the device.

By the end of the year Lindsay had been hired by Poniatoff; his assignment was to design a magnetic head for an Ampex tape recorder. Mullin himself was working with a former officer, Colonel Richard Ranger, who also had brought a Magnetophon back...
from Europe and had decided to produce his own recorders. Despite the seeming competition, there was an obvious pooling of technical talents. Mullin was not available to work for Ampex, but when Lindsay had finished his new tape head it was tested on Mullin’s Magnetophon.

The head worked perfectly, and Poniatoff and Ampex were in the tape-recorder business. Lindsay was put in charge of designing the first recorder, the Model 200. Early setbacks included financial as well as technical problems and a good deal of skepticism about the whole idea. Ampex seemed to be living on borrowed time and bank loans.

Then an unexpected challenge came from Bing Crosby, whose half-hour radio show was, in 1947, losing its formerly high Hooper rating. Analyses of the problem traced the fault to the poor quality of the disc transcriptions used on the air and pieced together from an hour’s studio work. And Crosby refused to do a live program. To get a smoothly edited, cleanly spliced, high quality show, he ordered twenty Ampex recorders (at $4,000 each).

From then on, Ampex’ star rose steadily as it extended its influence and that of the tape medium. The Model 200 was superseded by the Model 300, whose design configurations became the NAB standard. The disc-recording industry underwent a profound change; within five years editing and the LP had supplanted endless recuts of wax-mastered 78s, and consumer versions of tape equipment were produced.

Poniatoff presided over the company until 1955, when he became chairman of the board. He went into full retirement only seven years ago. He lives with his wife, Helen, in the home he designed himself—consulting with and receiving approval from Frank Lloyd Wright.

His early interest in agriculture became a favorite pastime, and the Poniatoffs have conducted serious experiments with soil conditioning to improve the nutritional value of the fruits and vegetables they grow. As a contributor to technological advance himself, Poniatoff recognizes and appreciates its benefits, but he is equally concerned about its adverse effects. His focus has been on preventive medicine. He has been involved in many organizations—among them the Foundation for Nutrition and Stress Research, which he sponsored—devoted to the study of ways of living as healthfully as one can in an increasingly unhealthful environment.

The man who insisted on quality of product also insists on quality of life.
Audio '78

Bigger and Better—and Then Some

More powerful amps and receivers, more efficient speakers, lower noise and distortion in electronics and tape equipment—these are among the current prospects and promises of the audio industry.

by Harold A. Rodgers and Robert Long

The fall of 1977 and beginning of 1978 are shaping up as periods of evolution more than revolution in high fidelity gear. While last year’s equipment has not been rendered obsolete, the softer glint that characterizes this year’s new offerings is not to be squinted at. Continued increase in value for the dollar at the middle and lower price points represents a real and worthy gain for the buyer, and the year is not altogether without glamor.

Perhaps the keynote of the season was struck last spring when Yamaha announced that its new line would offer improved performance in some respects (not that its previous line was any slouch) at significantly reduced prices. Pioneer and others had made similar announcements, but Yamaha’s intentionally limited distribution (“selected dealers” is the advertising term) makes it something of a specialty line and creates the expectation of what the British call “pricey goods.” Its reductions therefore are all the more dramatic. Similarly, companies like Technics and Sansui have been introducing perfectionist-fringe superunits at surprisingly modest prices. And the features and performance of $200 cassette decks from Aiwa, Hitachi, and others often outdo those of $300 “professional” decks of only two or three years ago. A welcome trend—perhaps the most welcome of the trends discerned in the industry’s spring and summer announcements and at the Chicago Consumer Electronics Show in June, and reported on here-with.

Electronics

Better semiconductor devices and integrated circuit “op amps”—operational amplifiers—optimized for use in audio circuits rather than analogue computers are becoming available, giving the engineer more flexibility than ever before. Yet, while circuits are getting better all the time, the pace of improvement seems staid and deliberate. Also, since the problems under attack are generally of limited scope and well defined, there is little in the way of long-term trends.

There are, however, what could be called mini-trends. These arise when one problem captures the imagination of a sizable fraction of the engineering community or when marketing considerations—“XYZ got his distortion down another couple of tenths; we’d better try to beat that”—put similar constraints on many manufacturers at the same time. Most often these problems are readily solved and not heard about again, which suggests faddishness and instills in some observers a bored “what will it be this year?” attitude.

A view as jaundiced as this is not really justified by the facts, however. For a large percentage of new developments in electronics become standard despite the suggestion of ephemerality created by their brief time in the spotlight. It would seem

An operational amplifier is a device originally developed for use in analogue computers. It can be connected (via feedback) so that its gain is equal to the ratio of two impedances, and thus can be used as an audio gain stage.
that once everyone in the industry knows how to do something right, no one wants to say much about it anymore. And maybe that is as it should be.

Preamplifiers

In the eighteen months or so since Tomlinson Holman (then of Advent Corporation) established that a phono cartridge can interact with its load in an undesirable way, especially if the load varies nonlinearly with frequency (as it does in many phono stages), the question “Do your pickup and phono stage love each other?” has been at least implicitly asked in most literature describing preamps. Some new designs, like the BGW 203, feature dazzlingly innovative circuitry, while others, like the Hafler preamplifier (yes, Dave Hafler of Dynaco and Ortofon fame), use more conventional circuitry that has been exhaustively tested, often by very sophisticated methods. Hafler, whose preamps are among the few available as a kit, has also taken pains to minimize IM distortion of ultrasonic signals, whose products may nonetheless contaminate the audio band.

But if a prize for preamp razzle-dazzle is to be awarded for 1977, the Crown DL-2 Synergistics Series Controller seems the likely winner. Crown’s engineers approached its design with a blank sheet of paper. They have put the phono stage in an outboard module that can be located near the turntable (to eliminate the routing of the cartridge output through long cables) and have housed the power supply in a case separate from that of the amplification and control circuitry. Digital switching and readout, apart from their basic utility, add a space-age touch to the total package.

The new Jennings preamp also uses solid-state switching that is triggered (rather than accomplished) by the front-panel knobs and buttons. In its auto-select mode it plays FM unless and until a signal appears at another input, in which case it plays the source in which a signal appeared most recently, reverting to FM when that input has had no signal for approximately 30 seconds. The plug-in phono section currently is available in two versions, for conventional pickups and moving-coil models, respectively; other versions are projected when available cartridges dictate special needs.

Pioneer, apparently making a fresh commitment to meticulously engineered separates with its Series Twenty, uses a low-interaction, high-gain phono stage in the C-21, the preamp of the series. The load impedance is adjustable to suit a variety of cartridges, including moving-coil types. (The gain is sufficient for all but those with flea-power outputs.) Sharing the “back-to-basics” approach of the rest of the series, the preamp has relatively few inputs and outputs, but a companion switching unit, the U-24, can expand these to a number that will satisfy almost anyone.

Mitsubishi, a relative newcomer to the U.S. audio marketplace, uses a differential amp input in the phono stage of the DA-P10 preamp, as do many Japanese manufacturers in their better designs. The stable input impedance of this configuration should help to terminate the phono cartridge properly. More prominently, however, this unit, which bears a retail price that belies its sophistication, features dual monaural construction (two independent mono preamps on a single chassis) with its attendant benefit of low crosstalk.

The Harman-Kardon Citation 17s is designed to interface well with cartridges and to hold RIAA equalization to unusually low tolerances. While low- and high-cut filters have been included in this new model, the company’s traditional concern with wide bandwidth remains in evidence. The Model 17 is similar but, like its predecessor, the Citation 11, incorporates a five-band graphic equalizer. (The 17s has no tone controls at all.)

Since bringing the cartridge-interface problem to light, Tom Holman has left Advent and joined Ap! Corporation, a new Boston-area manufacturer. His first project has been, naturally enough, a preamp incorporating a good many of his somewhat unorthodox ideas. Besides offering the pickup a highly accurate termination, the phono stage is able to accommodate a pre-preamp module (to be offered later) for moving-coil cartridges. The bass control can be switched to provide accurate loudness contours based on the work of the late Harvard professor S. S. Stevens; to prevent transient intermodulation, high-frequency response has been rolled off at 40 kHz.

NEW EQUIPMENT ON OUR COVER

New preamps range from the simple and familiar (by David Hafler, founder of Dynaco) to the complex and exotic (a digital control center from Setton, based in France).

Other specialty manufacturers have not been idle. Hegeman Laboratories is following up the Input Probe, its first effort to isolate a cartridge from an undesirable load, with a new preamp. The unit will use an external power supply and passive RIAA equalization. Like the new Harman-Kardon, the Hegeman eschews tone controls. An advanced preamp of aerospace-style construction from Analog Engineering Associates, the Model 520, features circuitry designed with computer aid for minimum transient distortion, which the company has developed sophisticated means for measuring.

Similar in appearance to the C-1000 preamp from Luxman, the new C-1010 also offers comparable performance while dispensing with only a few convenience features. As the leading advocate of vacuum tubes in high-performance audio equipment, Lux has added a vacuum-tube preamp. Model CL-32, whose specs are said to be comparable with those of the company's solid-state units.

The Model 10 preamp from Dunlap Clarke includes a high-gain phono section for moving-coil phono cartridges, although it can be ordered without this feature at a moderate saving in cost. The new model shares the "bulletproof" design and construction for which Dunlap Clarke's Dreadnought series of power amplifiers is noted.

Current interest in moving-coil cartridges has prompted quite a number of manufacturers to provide for them in their preamps. One such unit is the state-of-the-art RAM-200 offered by RAM Audio Systems, Inc. Provisions are made for loading cartridges of moving-coil and moving-field types with the impedances they require for best performance.

What may have been the most elaborate tour de force in disc-playback electronics is the Accuphase C-220 stereo disc equalizer. The $900 system, which contains a moving-coil head amp, is a "no-compromise" design and even bypasses the user's preamp and control center, feeding the power amp directly when in use.

The PAT-5, long a standby of the Dynaco line, has been upgraded as the PAT-5/FET Improved and now uses a high quality op amp with field-effect transistor inputs in the tone-control and output sections. Besides improving basic performance, the change allows for the switching in of 6 dB more gain for the phono sections, which will accommodate some moving-coil cartridges without the use of a transformer or separate preamp.

The SAE 2100 preamp has low-distortion phono circuitry, with special attention paid to the avoidance of slew-rate limitation (signals changing more quickly than the amplifier stage can respond to them). It also encompasses a parametric equalizer in lieu of conventional tone controls plus equalization of dynamic range through linear compression and expansion, or optional peak limiting. The latter two are situated in the circuit so that they can be applied to signals going to or coming from a tape recorder.

Power Amplifiers

For a while now the trend in separate power amplifiers has been to bigger and better. The "bigger" part seems to have abated at its outer fringes, as the magic level of 30 dBW (1,000 watts) per channel into 8 ohms, with which the industry has been flirting, remains a mirage. On the other hand, the level of 23 to 24 dBW (200 to 250 watts) has never been more crowded. And choice is available even at 27 dBW (500 watts).

Better would apply to the ever-diminishing figures for harmonic and intermodulation distortion, a great many of which have fallen into the rarefied territory on the low side of 0.1%. Signal-to-noise ratios of 100 dB or more are commonplace, as are monitoring facilities such as output meters and clipping indicators. Although no consensus as to the exact nature of the beast yet exists, a good deal of engineering effort has been expended on the suppression of transient distortion (often
known as TIM, or transient intermodulation), both in power amps and preamps.

Moving in oddly contradictory directions, one segment of the industry has become enamored of Class A output stages, while another is looking for higher efficiency. Threshold, interested in both, has realized a Class A 23-dBW (200-watt) design by means of special dynamic biasing, holds quiescent dissipation equal to rated output power rather than four times that amount, as would usually be required. Pioneer, a company whose image grows ever more protean, surprised us with its Model M-22, a massive amp with Class A output capable of 14 3/4 dBW (30 watts) per channel.

Bucking the trend in yet another way, Pioneer introduced the Spec-4 power amp as a companion to the Spec-2. The new unit has a smaller output—21 3/4 dBW (150 watts) per channel as compared with 24 dBW (250 watts)—but the rated distortion has been reduced an order of magnitude to 0.01%.

The largest amps we saw at CES were the rugged and now familiar Dunlap Clarke Dreadnought 1000 at 27 dBW per side and the new Rotel RB-5000 of like measure. The Rotel claims an astonishing 0.009% THD at full output and at 0 dBW (1 watt). IM distortion is similarly rated, and the signal-to-noise ratio (IHF A-weighted) is said to be 120 dB.

Hitachi, already the leader in the efficiency race with the 18 3/4-dB (75-watt) Class G power amp section of the SR-903 receiver, issued a challenge with a Class G amp rated at 23 dBW on a continuous basis and 3 dB more (400 watts) on a short-term basis. Using more conventional circuitry (Class B), Hitachi has put a glamorous semiconductor power device, the MOSFET, to work in a super-low-distortion amplifier rated at 20 dBW. Total harmonic distortion is said to be less than or equal to 0.005% from 5 Hz to 20 kHz and no more than 0.01% at 100 kHz.

But Soundcraftsmen has joined Hitachi in the world of exotic amplifier design dedicated to increased efficiency. Whereas Hitachi’s Class G uses an additional set of power devices that rescues the efficient (low-power) set when signals exceed its capacity, the Soundcraftsmen version, dubbed Class H, uses the same set of output devices and switches to a power supply with a higher voltage. The switchover is made when a module that monitors the input signal “decides” that clipping is likely to occur if that signal is passed to the output stage while it is energized from the low-voltage supply (set at about 1/2 of the upper voltage limit). At that point the supply voltage is adjusted automatically to provide sufficient margin for the output signal. The controller has more gain than the signal channel, so that the output swing is less than the supply voltage at all times—until the larger supply bumps against its limit. Run at 17 dBW (50 watts) per channel, a third of its rated power, the new unit should dissipate about 200 watts less heat than a conventional (Class B or AB) design.

Dual power supplies have been retained in the Citation 19, which, true to Harman-Kardon tradition, has a very wide bandpass. The manufacturer cites this characteristic as being effective in preventing transient distortion and has investigated the sonic effects of different biasing in the output stage, including a circuit in the new amplifier to maintain optimum bias automatically.

Mitsubishi, too, uses separate power supplies for the two channels in its new series of power amps. Most notable in this line is the ability of the power amps to “dock” with either the modular preamp to form an integrated amp or with a power meter. Joining the heat (literally) of the high-power Class A contest, Nikko is offering a unit rated at 20 dBW (100 watts) per channel with THD of 0.06% or less. The massively constructed amp is fan-cooled.

### Integrated Amps

Integrated amps, although not in general characterized by the kinds of technological strides that basic power amps show, are becoming more sophisticated and tend to offer a striking range of control features—often at surprisingly modest prices. Integrateds are not in the forefront of the power race, but most product lines offer one or two units at or near the 20-dBW point. As in separates, the preamp sections often have phono sections designed to work well with real-world pickups, and a number of models feature wide bandwidth—sometimes with response down to DC. (Fortunately, most contain subsonic filters or at least switchable blocking capacitors that can induce some low-frequency rolloff.) And tone controls with variable turnover points are much in evidence, especially in the higher price brackets.

The Kenwood KA-7100, introduced at the Consumer Electronics Show, is direct-coupled, like the slightly earlier K-9100. It lacks the phono gain adjustment (and the ability to handle moving-coil cartridges) of the top model, as well as the separate power supply for the preamp section, but it does have separate power supplies for each of the two channels.

Sansui’s approach to avoiding transient distor-
tion in its integrated amps is to use bandwidth extending to 200 kHz along with its direct-coupled power sections. Special attention to the phono stages has resulted in RIAA equalization (extended, 20 Hz to 20 kHz) that is said to be accurate to ±0.2 dB.

Marantz has introduced five integrated amps, all with response down to DC, with the top model boasting a power output of 21 1/4 dBW (130 watts). Featured throughout this line are very sharp (8 dB per octave) high- and low-cut filters and separate filter capacitors for each channel.

Two new models from Technics are more modest in power output (and price) than many and eschew the fashionable DC response, but they include a well-chosen array of controls. Both models claim extremely accurate phono equalization; the higher-priced unit has a subsonic filter in the phono section, where it is effective in protecting subsequent circuitry from overload by record warps and other spurious low-frequency signals.

Like the receiver line, introduced shortly before CES, the new Yamaha integrated line is characterized by a “noise and distortion clearance range,” a parameter that specifies a degree of freedom from distortion and noise for a signal injected at the phono input and sampled at the output terminals of the power amp. The phono section of the top model includes switchable load impedances and accommodation for moving-coil cartridges.

Onkyo’s A-10, which will top out the company’s integrated line, likewise has an input for moving-coil pickups. Dual power supplies and grounding via a heavy-duty bus bar are used to minimize any undesired internal coupling. JVC has taken a different approach to the dual power-supply feature and used one for the preamp circuitry and another for the power amp. The result is said to be elimination of intra- and inter-channel crosstalk.

Lux Audio has expanded its Laboratory Reference Series, one addition being the 5L-15, a direct-coupled integrated amp rated at 19 dBW (80 watts) per channel. In addition to its high-performance circuitry, the unit features two protective modules: one by which the amp assures its own security, and one to safeguard the loudspeakers.

**Tuners**

The race for FM-tuner sensitivity seems to have reached a standoff now that practically any budget model is able to claim a 30-dB quieting point that approaches the theoretical limit of roughly 1.4 microvolts (8 dBf). Furthermore, the new IHF/IEEE standard, which is growing in popularity, has banished the microvolt and substituted the dBf, a unit of measure that is more reflective of reality and that has erased the familiar signposts in the competitive arena. Most important, however, is the industry’s apparent acceptance of the fact that the 30-dB quieting standard is itself a far cry from high fidelity.

Attention has shifted, therefore, to the amount of RF power a tuner must receive at its antenna terminals to deliver a noise suppression of 50 dB. This level of performance, which is not considered an exacting demand for most other components, assures at least reasonably noise-free listening. Most of the new tuners achieve this with almost stunningly low signal levels in mono, but it is a rare unit that can suppress noise by 60 dB in stereo without a fairly substantial input signal.

With the adoption of the 50-dB S/N spec, the emphasis has shifted from the attempt to capture and read marginal signals to an effort to squeeze the last drops of enjoyment from any good signals around. Some tuners use a wide/narrow IF bandwidth option that allows the user to reduce selectivity (when that is possible) in order to reduce distortion. New circuits that cancel the 19-kHz pilot tone instead of filtering it out have made a modest

Among new high-spec rack-mount tuners: Nikko Gamma 1.
proaches the problem of optimum tuning somewhat differently—by including a meter that indicates not necessarily center-channel tuning, but the tuning at which the audio output has the best S/N ratio. The more sophisticated of Fisher's two new models offers a meter that shows multipath and carrier deviation (an indication of the degree of modulation). Nikko's Gamma 1 tuner incorporates switchable IF and features professional styling and rack-mountability. The latest model from Technics eschews frills and costly convenience features in favor of solid performance.

If a really strong trend in FM tuners will be apparent this coming season, it is the one we noted at the outset of this survey. The performance of yesterday's supertuners is available at popular prices today.

Receivers

At one time, the state of the art in receivers would have been defined by that of preamps, tuners, and power amps. After all, what was there to making a receiver but combining all of these on a single chassis? Things have changed a good deal over the last ten years, as the synergism of the various sections has been better understood, and the receiver has achieved status—and popularity—as a component in its own right, not just as a hybrid.

It should, therefore, come as not too much of a shock to learn that the new Marantz 2500, the reigning champion (at least for the nonce) of the receiver power war at 24 dBW (250 watts) per side, has properties that cannot precisely be had by combining the company's separates. Thus while the top tuner, the Model 150, has oscilloscope tuning, it lacks the Dolby module option provided for this year's tuners. The 2500 has both.

Lux, long a holdout devoted to "separates only" purism, has entered the receiver market with three midpriced models. The two top members of the line include a built-in Dolby option, which appears to be derived from Lux's exotic (and high-priced) Laboratory Reference Series. Nikko, whose seven-model line of new receivers is headed by the NR-1415 rated at 22½ dBW (175 watts) per side, includes a variable IF bandpass in this top unit as well. Hitachi, bidding for the top power spot on a transient basis, has built a Class G power amp section rated at 23 dBW continuous and 26 dBW short-term into its top Series E receiver, Model SR-2004.

Technics, an erstwhile leader in the power race with 22½ dBW (165 watts) per channel, has stood pat with respect to power in the top model of its new seven-member receiver line. Concentration has been more on total performance, including impedance-selectable phono inputs in the Model SA-5770. Kenwood, apparently finding its own top receivers a tough act to follow, has decided to stay with success and beef up the budget end of its line. Its new KR-4070 is 16 dBW (40 watts) per side, and Kenwood calls it one of the best stereo values, feature for feature and dollar for dollar, that the company has ever offered.

Bang & Olufsen, a company from which unconventional components can be expected, has done it again with the Beomaster 2400. The new receiver resembles the Beomaster 1900 in styling and operation and offers somewhat better performance. But adding convenience to convenience, B&O has introduced a companion remote-control module that allows the listener to adjust volume, select program sources, or switch the unit on or off, all without leaving his listening position.

The new members of the Sansui two-channel receiver line (the company is one of the few that still offers four-channel models) share built-in Dolby decoding and output meters. Power ratings are 21 and 19½ dBW (125 and 85 watts). The top model from JVC not only retains the five-band graphic equalizer tone-control section and the cosmetics already used in the line, but raises rated power to 20½ dBW (120 watts) per channel. Setton International, new to the U.S., is introducing a receiver rated (conservatively, according to the company) at 20 dBW per channel.

Fisher's latest addition to its receiver line is a low-cost unit designed for new audiophiles. Harman-Kardon has also introduced a budget unit, but the star of its receiver line is the new, no-compromise Citation. Akai has announced the debut
of an entire six-model line topped off by the AA-1200, with dual output meters and a power capability of 204 dBW per channel. Rated at a modest 144 dBW (30 watts) per channel, Aiwa’s new receiver aims for balanced performance and flaunts its strikingly attractive styling. Optonica’s SA-5151, at 194 dBW per side, sports a control panel (with FM dial angled for easy legibility) that shows concern for the convenience of the owner who will put the product to use.

Introducing a bit of advanced technology in a low-powered receiver, Sherwood is featuring a digital detector, which avoids tuned circuits, in its S-35CP, which claims 13 dBW (20 watts) per channel. Wintec, a new company introducing a budget-to mid-priced receiver line, has included an advanced phono preamp among the elements of its 17-dbW top model.

Electronic Accessories

Rounding out the field of electronics, several new add-on signal-processing devices will be on dealers’ shelves. Sound Concepts, already manufacturing a time-delay system, has announced a second-generation model that is said to be simple to operate, realistic in its effect, and adjustable so as to harmonize with both the listening room in which it is used and the reverberation present in the program material. SAE has begun to compete in this new area of consumer products with the Model 4100 Time Delay Ambience System. Phase Linear’s long-rumored ambience unit also is being readied for introduction this autumn. Burwen Research is demonstrating the Transient Noise Eliminator TNE-7000, meant to eliminate scratches, ticks, and pops during disc playback. The MXR Dynamic Processor, also a disc “depopper,” contains a linear expander capable of adding up to 20 dB of dynamic range enhancement to a program source as well.

The Sound Shaper, a budget-priced five-band graphic equalizer, has been introduced by ADC, and a battery-operated mixer featuring six microphone channels, two phone channels, and four line channels, with pan pots and a master volume control, is available from Akai at a surprisingly low price. As part of its sophisticated Series Twenty, Pioneer has brought to light a four-way electronic crossover that offers attenuation slopes of 6, 12, and 18 dB per octave in addition to a wide choice of crossover frequencies. High- and low-pass slopes are separately adjustable.

CBS Records has demonstrated a Tate SQ decoder built around the long-awaited integrated circuits from National Semiconductor. The chips will be available to other manufacturers. The new decoder compares favorably with the elaborate unit introduced by Peter Scheiber some months ago. Peter Scheiber Sonics, a new company formed to manufacture the $2,000 high-end unit, has established itself in Indianapolis.

Loudspeakers and Headphones

Prominent in the loudspeaker news from CES this year is the entry of two major companies into the dynamic speaker market. Koss Corporation is well known as a maker of headphones and has been marketing electrostatic speakers for some time. Bolivar Speaker Works is a new offshoot of Harman International that apparently will concentrate on moderately priced speakers and leave the high end to sister company JBL. By using vented-box designs, both of these entrants typify in their products the concern for efficiency now sweeping through the industry.

Also of technical interest is the still controversial matter of phase coherency. Is it important for all of the frequency components of a transient to reach the ear at the same time or with negligible delay? John Bowers of Bowers & Wilkinson says it is and cites research data showing that stereo imaging is thereby improved. Companies as diverse as KEF, Leak, Dynaco, and Ultralinear, to name a few, seem to agree that simultaneous arrival of frequency components is important. At least they were all exhibiting models with staggered drivers (or, sometimes, sloping front panels) and specially tweaked crossover networks that make it possible.

At the root of the new technological spurt in speakers is, we suspect, computer-aided design, a technique that gives ready answers to questions that once would have required insurmountable quantities of calculation. Designing phase-corrected crossovers is such a problem, as is the design of vented (and therefore efficient) woofer/box systems. Interestingly, the theorists A. N. Thiele and R. Small have shown that this too is a problem in filter theory.
Some engineers have arrived at characterizations of the low-frequency behavior of loudspeakers independent of the work of Thiele and Small. Ed May of Marantz describes the problem as "relatively simple." The new 900 series from Marantz lets the listener remove a plug from the enclosure and convert the system from a sealed to a vented one. The vent enhances low bass at the expense of a slight peak that adds "punch" to rock music. The Koss CM 1010 allows the listener to add mass to or subtract mass from the passive radiator (vent substitute: in engineering parlance) in order to effect a similar tuning. Ultralinear uses an arrangement similar to that of Marantz in both of its time-compensated speakers.

The JBL L-212, beyond its unique and sophisticated design, shows another trend in loudspeakers: separate amplified subwoofers. The one in the L-212 is said to extend the lows to 25 Hz and combine the amplifier output of both channels from 70 Hz to that point. The drivers that make up the stereo radiator form a quasi-panel array intended for maximum dispersion.

An amplified subwoofer is also offered by 3A, a French company making its CES debut. Along with more conventional designs, the company offers models in which a sensor delivers a feedback signal to the internal amplifier, which can then correct nonlinearities in the speaker. Philips has had a similar system in its line for some time, using a different sort of feedback transducer. Now a three-way triamplified-system feedback model has been added to the top of Philips' line.

Self-powered loudspeakers can better match the amplifier and its load, not to mention the potential benefits of incorporating a second amp and bramming the drivers. Advent has used such a system in a variant of the New Advent Loudspeaker—the Powered Advent Loudspeaker—the Powered Advent Loudspeaker. ADS's top model (ADS-910) will be available with conventional crossover, "program cards" for external bi-
or tri-amplification, or built-in triamplifier; an LED power meter is also offered as an option.

Related to the self-powered speaker is the equalized speaker. This type of design—described by Thiele—places an equalizer ahead of the power amp to tailor the response of the low-frequency driver and can be used with vented or nonvented systems. Electro-Voice employed this technique in its Interface A and B, and is now applying equalization to larger systems with extended lows. Interface D, the largest addition to this series, uses a vented midrange as well. Thiel Audio (not connected with the Australian theorist—note the absence of the final e) is a new company also making equalized systems. Producing spinoffs from the supersophisticated Quantum Line Source, Infinity Systems has introduced the Quantum line, which even includes a replacement for the redoubtable Monitor Jr.

The number of vented speakers appearing on the market might suggest that sealed systems are passé. Nothing could be further from the truth. Despite the penalty extracted in efficiency, the acoustic-suspension speaker is alive and kicking. Acoustic Research, also designing via computer, has broadened its line to include the AR-15, 17, and 18, all moderately priced systems. The ADS 200 introduced by Analog and Digital Systems not too long ago is a truly minuscule acoustic-suspension design. This model holds a little corner of the market for itself but is being elbowed about by similar competing designs from Visonik, Braun, Tamon (a Japanese company new to the U.S.), and Canton (a German manufacturer). ADS has, for its part, gone on to improve the 200 (now the 200A) and produce derivatives optimized for automotive applications as well as a slightly larger Model 300.

Yamaha, also committed to sealed systems suitable for bookshelf placement, seems to have concentrated on driver and crossover network design and massive cabinetry in the NS-690, which claims among its various attributes exceptional transient response and freedom from harmonic distortion. Mitsubishi introduces a four-way monitor system of monstrous proportions, using a 15-inch woofer and a passive radiator of the same size (both of a newly developed plastic) and maintaining solid bass response right down to 20 Hz.

Pioneer has carried its HPM series forward with the HPM-150, which aims for superior dispersion by placing a horn-loaded high polymer tweeter directly on top of the cabinet. And BIC has divided its line into a Standard Series and a System Monitor Series. The latter, consisting of three models, is protected against damage from high-powered amplifiers and is said to be capable of monitoring a music system.

It is possible to trade away some of the efficiency of a vented system in return for a smaller cabinet and be sure that the system has been
The "directness" of direct drive in turntables presumably has contributed to the success of the genre; whatever the reason, the success is resounding—if not unchallenged. Technics, whose claim to being the direct-drive producer has some merit, has added both single-play turntables and changers to its line and (thanks in part to single-IC motor-controlled circuitry) brought minimum prices even lower. Other Japanese companies seem to consider direct drive obligatory in at least one deluxe unit; the new Visonik line, for instance, has one direct-drive model, followed by four employing belts. The direct-drive list is endless. Some (from Pioneer, Sansui, and JVC, for example) have quartz control. Dual has introduced one model (the 604 automatic single-play system with digital control) into its direct-drive line. Fisher, in a novel approach to the problem of integrating the platter and the rotor of the drive motor, has "bent" a linear motor with 120 magnetic poles into a closed loop and attached it to the underside of the platter.

But the Europeans seem to be the leaders in belt drive. Thorens, which continues a long tradition in the field, sums up the case: "No matter how low the rumble spec on a direct-drive system, it can always be lowered still further by adding a belt." Dual does, of course, offer belt-drive models (in three changers and two single-play units), as do Elac (the new 870), Garrard (with DC-servo drive motor), and BSR in its new Quanta changer line. The Garrard GT line (there are six new models in all) uses Delglide, an automatic function assembly employing self-lubricating Delrin parts, for ease and gentleness of record handling; styling of some of the new units is refreshingly un-British.

Also refreshingly un-British is the Accutrac series from BSR/ADC. (Though BSR, the parent company, is British, ADC—which produces Accutrac—is based in Connecticut.) The superautomation system for playing records this year outdoes itself by adding, in the Accutrac +6, the ability to handle—and program—up to six records simultaneously. The +6 is available in three versions, from $300 (no remote controls) to $400 (both volume and sequencing can be altered from across the room).

Several models are traditionally British in some respects—certainly in providing only single-play operation, which, whatever its overseas sales, is the basis for Garrard's fame at home. Among them are Sugden's BD-103, available with or without unipivot arm; the new Monitor ET-1000 (astonishingly, with a direct-drive system and binary speed readout) with its ET-100 auto-liftoff device for the supplied SME Series II arm; and Environmental Sound EST-4 (also direct drive!), whose ultralight arm has mercury signal contacts to prevent drag from lead wires—long a favorite idea in British audio circles, but one that is difficult to realize in production.

Somewhat similar in first appearances to the EST-4 is the Audio Retroflex LT-76, a handsome belt-drive unit. (Both have circular "satellite" supports revolving around the spindle.) The company,
which is new to us, is based in Illinois. Another American manufacturer new to the turntable field is Infinity: its $400 Black Widow Air-Table (which, naturally, incorporates the Black Widow ultralight arm) rides on an air suspension and is belt-coupled to a servo drive-motor system. A pump—said to be noiseless—provides the necessary air stream, preventing bearing-induced rumble. Additional isolation is provided by mounting the entire platter-and-drive system on a separate sprung subassembly.

Speaking of ultralight arms, ADC has entered the lists with its LMF-1 (integrated) and LMF-2 (removable cartridge mount) models, using tapered carbon-fiber tubes in the construction. We expect other companies to add carbon-fiber arms, too; its strength-vs-mass advantages are obvious, and a trend toward this sort of construction in top models seems to be shaping up.

ADC also figures among those companies offering new pickups. The ZLM and ZLM Deluxe, the top of the Professional series, use a stylus configuration termed Alptic. Its geometry is calculated to spread the bearing force of the tip upward and downward along the groove wall, keeping the surface along the wall as small as possible for maximum high-frequency resolution with minimum tracking force. This approach was, of course, begun with the elliptical design and carried further by the Shibata, upon which the Alptic is said to represent still more improvement. Stanton has refined the Stereohedron tip, also introduced as an improvement over the Shibata with a longer, narrower contact patch, and is offering the 681 S pickup featuring the new stylus shape. The 681 EEE (S-type) represents the retrofit of a Stereohedron stylus to the 681 EEE cartridge. Empire has a new model, the 2000T, which (at $90) is being dropped into the middle of the 2000 line. Audio-Technica has two new series: the rugged professional models with an ATP prefix and three Compass models intended for replacement and upgrading in existing home-entertainment systems. Prices in both lines range from $35 to $75.

All of the foregoing are what might be called conventional magnetic pickups. There are new moving-coil models, of course, since this type of design has achieved a sudden popularity in the last few years. And Ortofon—which for years was almost alone in pursuing the virtues of moving-coil design—has a full line of both types. Micro Acoustics has a new top model for its series of electret cartridges. The 530 mp has stylus geometry analogous to that of the company's cutting styli. RAM Audio Systems has taken another tack: Its semiconductor strain-gauge cartridge is part of the S300 RAM 9210SG Record Transducer System, which also includes the necessary current source. The RIAA equalization is carried out mechanically, and the output is suitable for AUX or similar inputs.

Disc Traker, an air-cushion damping device that attaches to the tone-arm headshell, is available from Discwasher. The device is said to reduce the effects of tone-arm resonance and record warp.

Tape and Tape Equipment

New cassette tapes include TDK's AD, successor to that firm's Audia, with an improved high end even though it uses the same bias and equalization, and the three-member Scotch Master series. Master I is an improved ferric that replaces the earlier Master, while Master II is a ferric-coated similar to TDK SA and Maxell UDXL-2 and designed for use with "chrome" bias and equalization. Master III is a ferrichrome. The entire line features newly designed translucent cassette shells with low internal drag along the tape path. Memorex has recently announced distribution of its new Quantum, an advanced tape for open-reel machines.

The Sunday-duffer sort of open-reel equipment seems to be dead; all the new products we have seen in this format are, at minimum, elaborate and quasi-professional. Pioneer's RT series, for example, is intended for rack mounting. Teac's news is in the Tascam semipro line. Grundig's latest is a forest of controls that might faze Captain Kirk. We're not complaining, mind. But the message is clear: If you're not committed to open-reel equipment, you might better look elsewhere.

Cassette-equipment lineups are quite different. Everybody seems to have new models—even H. H. Scott, which has entered the tape field with two—and most of them (including both of Scott's) are front-loaders. Some manufacturers tell us that top-loaders are difficult to sell these days, suggesting that some bargains may be available in that format. There is a good deal of emphasis on high-end models: Pioneer, for example, has introduced the monitor-head CT-F1000 with styling that suggests some Eicaset models.

Fisher, committed to three-head decks throughout its cassette line, has extended its high end with Model CR-5120. Akai introduced two new models, one with three heads. The latter has adjustable
Dolby calibration and, of course, permits monitoring from the tape. The new Dual C-939 has, in addition to its auto-reverse feature, the capability of allowing recorded errors to be faded or edited out electronically during playback. JVC's new high-performance model contains the company's proprietary Super ANRS (automatic noise-reduction system) and Sen-Alloy heads.

A three-head deck is available at the top of the Marantz line as well. The Model 5030 includes Dolby for simultaneous record and playback and an adjustable peak limiter to prevent overrecording. Teac has reinforced the lower end of its cassette equipment with Model A-103, which has an impressive array of features and claims excellent performance for its modest price. Uher's new—and first—cassette deck (as opposed to recorder) features a three-motor transport and digital logic controls and can accommodate ferric, chrome, or ferrichrome tapes. A cassette changer capable of playing continuously for up to ten hours is available from Lenco, now being distributed by Neosonic.

The future of the Elcaset, meanwhile, remains in doubt although decks are available from Teac, Technics, and Sony. Advances in cassette-head technology, noise reduction, and tape oxides suggest still further improvement in that format and a possible undercutting of the Elcaset's touted advantages—at least for the consumer market. In particular, it appears a foregone conclusion among some manufacturers that 1978 will see the introduction of metal-particle (sometimes called alloy) tape formulations from several manufacturers that will put the cassette a giant step ahead of the present state of the art. Nakamichi, for example, plans to be ready when the tape is, with mastering decks (and perhaps consumer models in short order) designed to use the new "pigments," which appear to be beyond the reach of current decks.

Whether digital recording also can make a significant difference to consumer recording is much less clear. Though there has been a great deal of buzz over the subject in recent years and Mitsubishi this year demonstrated a prototype of a consumer model, the path to consumer prices and quality comparable to similarly priced analogue recording equipment does not seem altogether smooth. Home digital recording might be as long in coming as home video tapping—which, we were told ten years ago, was about to take over home entertainment.

Curiously, the hardest evidence that digital recording is moving into consumer equipment comes from ADS, which is introducing astonishing digital electronics (including an FM tuner) for automotive use. The design makes many a fancy home digital tuner look more than a little old hat. This may be a harbinger of the next generation in home componentry.

Digital audio has also come to video tape: Sony's system—for its Betamax or competing formats—recognizes that video tape is more like data processing than like analogue audio and that digital audio therefore makes particular sense when used with video tape. Sony is not, in fact, proposing its digital system for pure audio at present. And since Nakamichi is projecting S/N ratios of around 95 dB for metal-particle cassettes in the next generation of its mastering decks (equipped with the new Telefunken noise-reduction system), while Sony is claiming only 65 dB for its digital system, the theoretical advantages of the digital technique still seem far off.

So does the development of a large-scale market for home video tape, thanks to the continued systems competition. Matsushita, for example, has introduced VHS, which is being licensed to other companies. One is Magnavox, but its announcement of the fact was all but lost in its announcement of fall availability for a Philips-type video disc player. The conclusion seems inescapable that the Philips format is shaping up as a clear leader in video discs, while video tape has no leader—only a tangle of bandwagons on which potential licensees place tentative feet in the hope that they may go somewhere.

The immediate news in video therefore seems confined to games (a rapidly growing field) and large screens (with somewhat less frantic growth). Advent has added a third projection system, its smallest to date, ESS, in conjunction with Tinsley Laboratories, is working on a rear-projection system that derives its image from a conventional color tube and is expected to sell at about $4,000 for a 52-inch diagonal screen that can be viewed in bright ambient light.

All of this contrasts sharply with the rather staid (and solid) advancement in audio componentry. Its manufacturers are to be congratulated for avoiding (at least at present) the faddist and bluesky excesses that have plagued other areas of consumer electronics in recent years: notably CB, video tape, and digital watches. Perhaps the anarchy of early quad has taught us all a lesson.
At BASF, our world has always been flat.

Absolutely flat frequency response. Because what you should hear on a cassette is nothing more than you record and nothing less. Others talk about it. With us, it's an obsession. It's a vital part of the goal we set 45 years ago when we invented recording tape... the purest, most accurate sound that tape can reproduce.

Straightening out the frequency curve requires an obsessive concern with detail. We start with the best quality ferric oxide and mill it by a patented process. After coating, our tape rides on a heated cushion of air, filtered to NASA standards to avoid contamination and abrasion. Polishing and slitting are accomplished by exclusive BASF-developed techniques and equipment. And even our cassette cases are different, incorporating our patented Special Mechanism, for years of smooth and dependable tape feed. The result is a cassette that will match the performance of the finest decks on the market.

At BASF, we're purists. We want what comes out of our cassettes to be identical to what goes in. Not hyped and not muted. And that's a flat statement of truth.

BASF The Purist.

Nothing less than total accuracy will ever satisfy us.
To the question, What singer now active combines queenly dignity, earthy sexiness, and quintessential Frenchness, there can be but one answer: Régine Crespin

There's something delicious about a prima donna who whistles on her way to open the door to a visitor. Régine Crespin, one day last spring, whistled a tune, opened the door of her borrowed apartment near the Metropolitan Opera, scolded her dog—a French poodle, of course—for barking, and asked her visitor in mock fear, "You didn't bring a camera, did you? I have to have my hair done." Reassured, she sat on a sofa and answered questions, frankly and unhesitatingly, in French-accented English.

One of the greatest sources of pleasure in a Crespin performance in the opera house, in the concert hall, or on records is her diction. When she sang the First Prioress in the Met's English version of Poulenc's Dialogues of the Carmelites early this year, she was the only foreigner in an otherwise American cast. Yet, as most reviewers remarked, she was the only one who could be understood. "I worked very hard on that part," she said. "At first I thought it would be very easy to do in English—that my French accent would go away when I sang. Then I started rehearsing, and I found out—agh!"

G. S. Bourdain, whose byline is appearing for the first time in HF, is a writer and editor for a daily newspaper in the New York metropolitan area and a lifelong opera buff.

It was pointed out that she sang only a few words with an accent. "Daughters," for example, came out "doughters."

"That's because my English teacher was English and not American," Crespin said. "What I really found difficult was to say 'it is' and not 'eet eese,' and anything with a 'th' since there's no such sound in French. I don't know how many days it took me to be able to say 'Mother Superior.' And when a 'th' was followed by an 's,' I was really lost.

"You know, when I was offered the part of the First Prioress, I was sure it wasn't for me—that it was a mezzo role. Then when I read the score, I discovered that many mezzos who sang the part didn't sing any top notes but transposed them. So I decided to do it because it's so dramatic. And I remembered I once told Poulenc [he created the role of the Second Prioress for Crespin] that I wished he had written a part like the First Prioress for me, and he said, 'Listen, in ten years you are going to sing it.'"

"I said, 'Never, are you mad? It's not for me.' And Poulenc said, 'Wait and see. You will do it.'"

"I've always been careful with diction because I remember going to the opera when I was twelve, when everything in France was sung in French, and often wondering what they were saying and
trying to catch words. This stuck in my head—to be understood as much as you can.”

Crespin, whose father was French and mother Italian, was born in Marseilles and grew up in Nimes. The first opera she saw was Lohengrin, and (the force of destiny?) it was the work in which she made her debut, as Elsa in 1950.

“I fell in love with opera right away,” she recalls. “I went once a week, and it was very difficult for me because my father was very strict and I was allowed to go out only once a week, so I had to make a choice between a movie with Jean Marais, or someone like that, and an opera.

“I’m glad my father was strict about it, though. Because even now, knowing what’s going on backstage at an opera or a play or musical, if I’m in the audience I get a feeling of impatience for the curtain to go up, of excitement—Ah, I’m really going to see something—even if it’s Tosca or Lohengrin, which I know by heart.”

Crespin has a rich, deep speaking voice, and aside from occasionally placing the accent on the wrong syllable, her English is enviable. When she first came to this country, in 1962, she hardly spoke the language, but talking with people and watching television, her schooling in English came back to her.

She was learning German at the time. “I met my husband when someone introduced us with the idea he could improve my German [Lou Bruder, from whom Crespin is separated, is a Frenchman from Strasbourg and an authority on German literature]. Now I cannot speak it any more; each time I want to, I speak English. Like Italian: I was speaking Italian quite fluently, then I learned Spanish because I have a house in Majorca and I had a love affair with a man from Caracas. He spoke Spanish to me, and I learned it, and now when I want to speak Italian, it comes out Spanish.”

Crespin plans to learn some Spanish songs and include them in a recital some time soon. At the beginning of the year, she began work on the role of Marina in Boris Godunov, with which she’ll open the Metropolitan Opera next month. Although she has sung the role in French, she has never sung Russian at all. “I’m scared to death to learn something I cannot really read or understand,” she admitted. “But I’ll do it.”

At the May festival in Cincinnati, Crespin gave a luminous performance as Dido in a concert version of Les Troyens à Carthage, the second part of Berlioz’ Les Troyens. She would love to sing the role at the Met, and anyone who heard her in Cincinnati would petition the opera house to let her do it, for her interpretation of the lovestruck, heartbroken, vengeful, and ultimately suicidal queen was vocally magnificent and rich in nuances undisclosed by other singers.

Crespin is set to record Chausson’s Poème de l’amour et de la mer this year. “I was supposed to record it in March 1976,” she said, “but I had to leave Europe for more Carmens in New York. When you skip a recording date, it’s a nightmare to schedule another one. Probably on the back I will put some Duparc with orchestra—nobody really has done that. I think Chausson and Duparc are a good combination. [A good combination indeed: Unbeknownst to Crespin, André Previn and Janet Baker have just recorded precisely this coupling for EMI.—Ed.] I have to learn also a cycle by Messiaen—a fantastic but difficult cycle called Harawi. It’s rather modern music but very beautiful.

“I never, never use recordings to learn a role. I think it is a bad way. I’m against it, to copy. You may not want to copy, but the records influence you. I think you have to learn the work yourself, rehearse it, sing it, and then if you want to check on something, okay. But otherwise, no records. To learn a role I take the score and study it and sing it for a while, then I let it sleep for a while, then I go back again. I think about my interpretation constantly.”

Crespin is one of the most elegant singers on the concert stage, and the taste that is apparent in her attire is matched by her intellectual and emotional comprehension of what she sings. Stylish phrasing is always a hallmark of her work. A recent comparison of recordings of Berlioz’ song “Le Spectre de la rose” from Nuits d’été, for example, showed that Eleanor Steber, Suzanne Danco, Victoria de los Angeles, Leontyne Price, and Janet Baker all sing the line “et sur l’albâtre où je repose...” from the last verse so that “je” falls on the third beat of the 9/8 measure and is elided across two eighth notes. It sounds fine—until you listen to Crespin’s recording and discover that she makes magic of it by stretching out “l’albâtre” so that “je” falls on a single unstressed eighth note.

“I didn’t learn that from anybody or work with anybody on it,” Crespin said. “I just felt it. I must say I don’t like, really, most of my recordings, because I hear only the faults. But Nuits d’été I love. It’s the recording I really prefer.

“It’s funny—several years ago I went to London for a big program when England joined the Common Market. The Queen and Prince Philip were there, and representatives from all the countries. Schwarzkopf was there, and Janet Baker. Baker and I had never met, so as we were both backstage I went to her and said, ‘Listen, I have really to tell something to you. No one can touch Mahler’s Songs of a Wayfarer any more because your recording of it—that’s it! I wanted so much to record it, but after you, it’s not possible.’ Baker was so sweet. She took my hand and kissed it and said, ‘I should have said the same after your Nuits d’été, but I made the mistake of recording it.’ ”

Singers say nice things to and of each other, but Crespin thinks sopranos can’t really be friends. “I could be friends with a contralto or a high color-
Crespin's versatility has enabled her, at the Metropolitan Opera alone over the past few years, to go from the role of Charlotte in Massenet's Werther to the title role in Carmen and, finally, just last season, to that of the First Prioress in Francis Poulenc's Dialogues of the Carmelites.

"Atura," she said, "but two sopranos who sing the same role? It would be a facade. If you sing the same parts, it's always a kind of competition. I have good colleagues in the opera, but not really friends."

Crespin has acquaintances almost everywhere she sings. "I meet people through mutual friends," she said. "Well, I have not so many friends, because what we really mean by friends you can count on two hands—even one, maybe."

The subject of friends led to that of a phenomenon of the opera world. "Once, four or five years ago, I met Birgit Nilsson at the Met," Crespin related, "and we chatted for a few minutes, and she said, 'By the way, how long have you been here?' I told her two weeks, and she asked, 'Have you met a man lately?' At that time I was separating from my husband, and I thought she was asking me if I had met somebody else, so I said, 'No, why are you asking me this?' Nilsson said, 'It's a simple question. Have you met a man since you've been here?' I answered, 'Yes, a lot of friends, of course.' And Nilsson said, 'But real men? I've been here for three months, and I count up, and I haven't met one.'"

"I have a lot of friends who are homosexual," Crespin continued, "and they're nice—like my brothers, like my sons some of them. I really love them. We have a lot of sympathie, rapport. We talk seriously, or we laugh. Prima donnas represent for them both mother and a kind of superwoman you can't touch. She's a goddess, a diva, and the more we are sophisticated, with big hats and big jewels and furs, the more they are fascinated. But there comes a point where you say—and my women colleagues feel the same way—'Enough.'"

"I must say, in the States it's more obvious. Of course they are present in Europe too, but there seems such a negation of masculinity and femininity here. In France, you walk along and, if you have a little hat or something, a man who passes or a cab driver will whistle or say 'Hi, hi.' But here, never."

As for the masculine in her own life, Crespin would say only, "Oh, you are very curious. Maybe there is a romantic involvement, maybe several. If one is not enough, take two."

My comment that the life of a diva seemed more hard work than glamor and romance reminded Crespin of "some singers who think only of the trappings, of being a celebrity. I'm really en colère [passionately] against these attitudes. If you must be a prima donna on-stage, all right, but why be a prima donna off-stage? Be an artiste first; the most important thing is the stage. Then maybe that makes you a prima donna in life too. You have to have a kind of humility. You have to ask yourself each morning if what you're doing is all right.

"I think about the time when I will have to re-
tire, and I know it's going to be difficult. I have thought about it for a long time because four or five years ago I had a big crisis. I was in a bad mood, I had a lot of problems in my private life, I was depressed and ready to jump out the window—really, I was suicidaire—and I knew the voice was not going well.

"One day, finally, after some analysis, I told myself, 'Now you stop for a while and take care of your voice and your health, or you are going to be really in trouble.' So I did. I stopped for a year [October 1973 to October 1974] just before learning Carmen to sing it in Strasbourg. I thought, 'If I sing Carmen well, if I have success, if it goes like I want it to go—okay, I go on. If not, I stop, because I cannot fight with myself, my voice.' It was a nightmare.

"I became like a student. I went to my teacher in Germany every week with my little bunch of music, to his little room, and during all that time I was thinking, 'What are you going to do if you have to stop?' So it's not new for me.

"I was very unhappy because, if I had stopped at that time, it would have been on a failure. Now I know when the time comes to stop it will be a normal ending of a career. That, for instance, is the problem with Callas. She stopped at a bad period, and that's why she's unhappy.

"I know it's going to be difficult. I know I'm going to be unhappy for one or two years, probably. That's why I've started to teach. I have a class in Paris, at the Conservatoire National de Musique, since last year. I didn't want to take it, but somebody was retiring and the woman insisted so much. She said, 'You should start now, when you are still in good shape and singing. Then the transition will be easier.' And she's right.

"I'm fascinated by the teaching. The students tell me, 'It's exciting to have you here, between going to New York and all over to sing.' They are young people, and for me it's very interesting to have a rapport with young singers. I'm sure I will be interested in the future I have in mind, because it will be my business—the singing business."

Meanwhile, before that day arrives, Crespin's calendar is full of singing and recording dates. And lovers of French operetta can rejoice that she hasn't waited—as several former prima donnas have—for high notes to fade before turning to that delightful repertoire.

Singers of international stature have recorded works from the German/Viennese repertoire, but French operetta recordings available here don't take up much shelf space in stores. The reason is twofold: The tongue-twisting spoken dialogue can trip up even the most fluent foreigner, making a French cast a necessity. And—unfortunately—a great voice, an international career, and quintessential Frenchness are not often combined in one person.

Crespin, who has included operetta arias in many of her recital programs, has started to fill the gap. Within the past few months she has had three Offenbach recordings released: La Vie parisienne, conducted by Michel Plasson, on Angel [reviewed in June]. La Grande Duchesse de Gerolstein, also with Plasson, on Columbia and La Perichole, conducted by Alain Lombard, on Erato [both reviewed in this issue]. The recordings, with all-French casts including Mady Mesplé, bring out the exquisite Frenchness and fun of the librettos and display the marvelous Crespin combination of regality and earthy sexiness. She likes the repertoire so much that she's considering doing Grande Duchesse on the stage or on film.

Crespin is looking forward to more travel too. "I've been to Japan once and would like to go back," she said. "It's a fantastic public. I've been all over Europe, of course, but not in Australia, nor in China—not on the moon, not yet!" Another thing she wants very much to do is to be a guest on the Muppets' TV program. "I want to sing 'Tu n'es pas beau' to Kermit the Frog. I love that show!"

Asked what she does when she's not singing, she couldn't think of much more than, "I'm busy, really, preparing or recording. "The thing I miss most is to have my friends to my house—it is on a little treelined street in Paris where cars don't go—to have a dinner and talk and so on. But that I can't do, because I talk. I drink, I smoke, and that is bad. I don't smoke usually, but in the summer, after bathing or a cocktail, it's so nice."

"In Majorca, I just rest, with the sun and water and beach and my swimming pool, and the days pass like this," she said, snapping her fingers. "In two months of vacation in the summer, maybe once or twice I listen to an opera or a concert on the radio or on records. Most of the time I listen to pop music, I dance, go out with friends, but I don't think about opera at all. The body, the brain, need to forget all the work and to relax completely."

As Crespin said good-by, I had occasion again to observe that decidedly French slant to her character. I admired a tiny gold figurine the singer wears on a chain around her neck. She slid the figure to one side, revealing another tiny figure beneath.

"One is a man and one a woman," Crespin said. "You can draw your own conclusions."
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Should someone tell you otherwise, they speak with forked frequency response.

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Thus our goal was to create speakers with a minimum of coloration. With a frequency response flat and wide. With low distortion. And with repeatability. Which is critical. Which means that each speaker we turn out will sound like the one before and the one after.

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Our basic dilemma was that speaker specs don't specify much.
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You can hear how pure water is. The purity of the water in which the pulp for the speaker cone is pressed will influence the sound. (Spring water is the best.)

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Suggested retail prices: SSU-3000, $300 each; SSU-4000, $400 each.

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We could go on, but at this point the best thing would be for you to move on to your nearest Sony dealer. And listen. Because the results of our three years of labor will be clear after three minutes of listening.

At which point, far from heckling our speakers, you'll be tempted to give them a standing ovation.
The SSU-3000 and SSU-4000. Great speakers like these deserve an audience.
The bones roil in the Sherwin M. Goldman/Houston Grand Opera production of Porgy and Bess

Catfish Row Springs to Life

RCA’s theater-wise yet musically fit Porgy and Bess is supplemented by a Turnabout disc that includes Gershwin’s “pre-opera” Blue Monday.

by David Hamilton

Last year, when London’s Cleveland recording of Gershwin’s Porgy and Bess appeared, it seemed unlikely that we would soon have an alternate complete version, let alone one that would succeed in just the ways that the London set failed. Yet that is precisely what has now appeared: a lively, moving, theatrically vivid re-creation of Catfish Row that makes a rather better case for the validity of Gershwin’s problematic opera, without sacrificing any of the undoubted musical probity that distinguished Maazel’s recording.

The RCA set stems from the stage production that opened in Houston on July 1, 1976, came to New York the following September for sixteen weeks, and then embarked on a national tour. That stage experience shows in the recording, and it’s important. Given Porgy’s various structural and musical flaws (which I discussed at some length in HF, May 1976), if the full-length version is to convince, it needs a lot of color, character, and dramatic punch going for it; the music by itself isn’t always strong enough to carry us from one high point to the next. It isn’t, say, Tristan, of which a musically expert performance can be enthralling even though it may fail to convey the full dimensionality of the characters and is thereby an incomplete rendering of the opera’s maximum potential impact.

The London recording, I felt, was short on color, character, and dramatic punch. A small but telling case in point: In the last scene, when Porgy returns
from prison, he is greeted by the neighbors, who, in that performance, sounded for all the world like the Catfish Row Madrigal Society, freshly scrubbed and polished to present the greeting for the Queen's Jubilee visit. In the new RCA set, they are casual, relaxed, like the spontaneous group they are supposed to be. And this pattern carries throughout the RCA recording: the musical pacing, the give-and-take of dialogue, the skillful use of sound effects—all reflect what has been learned from actually enacting Porgy on stage, rather than simply standing up and singing the music. (The Cleveland recording, it will be recalled, followed a series of concert performances.) Unlike some of Maazel's singers, all of these people are inside their parts—freer, more relaxed, more alive to the telling line, to the point of each phrase and the shape of each scene. The chorus is less "oratoric," the orchestra less "symphonic." Under the firm and capable direction of John DeMain, they treat the opera's theatrical essence. In the RCA cast, I'm especially impressed with Clamma Dale, who has that special extra gift for matching words to notes, for singing as naturally as speech, that makes one look to her future with special anticipation. (The same week that I heard this recording, I managed to catch her program of popular songs "for a summer evening"; on the basis of that, I'd cheerfully go to hear Miss Dale sing a laundry list anytime.) The voice has lots of color, firmness, and focus, and it's used with a real sense of purpose.

Another promising soprano in this cast is Wilma Shakesnider, a touching Serena, and Betty Lane sings a luscious, free and easy "Summertime." Donnie Ray Albert is a strong Porgy, but the other two male leads bring my only qualms about the singing. Andrew Smith's Crown is a shade free with the musical text (though vocally solid), and Larry Marshall even more so. I know there's a tradition of such freedom in interpreting Sportin' Life, and some of what Marshall does makes sense: The progressively freer variations on "It Ain't Necessarily So" work well because the tune is well established first. But he never gets the crucial appoggiatura figure on "New York" in "There's a Boat dat's Leavin,'" in the right place, and that really spoils the song.

In keeping with the performance's theatrical origin, much use is made of sound effects, with great success; they all seem natural outgrowths of the action, not artificial overlays. The action at the end of the first two scenes of Act III is altered (and so are the stage directions in the libretto) from the original score, so that (respectively) Bess comes out to see the dead Crown and emerges, high on happy dust, to go off with Sportin' Life—rather obvious effects, I think, but at least not downright contradictory to the music. (One other textual point: The libretto has been "de-expurgated," so to speak, of the various substitutions for the word "nigger" that were made some years back.)

The recorded sound, if less plangent and analytic than London's, is nevertheless quite good: a spacious ambience, natural balance, and plenty of impact. Up to now, we've had an old but honorable abridged performance of Porgy, full of atmosphere and style (the Odyssey set, produced by the late Goddard Lieberson) and a shiny, absolutely complete, but somewhat stiff version (London). The good news today is that RCA's version combines all the best points of both those recordings.

As a sort of appetizer for Porgy, Turnabout brings us a recording of Gershwin's first effort in the direction of opera, a twenty-minute treatment of the Frankie-and-Johnnie story that began the second act of George White's Scandals of 1922—but only for the opening night: it was quickly pulled from the show as "too downbeat." Originally called Blue Monday, it was revived in 1925 by Paul Whiteman as 335th Street (Will Vodery's original orchestration revised by Ferde Grofe). Since then it has cropped up now and again: in capsule form in the 1945 film Rhapsody in Blue, in 1953 on the TV series Omnibus, in a 1968 concert performance at Philharmonic Hall led by Skitch Henderson. A sort of ballad opera with accompanied recitatives, it boasts an absurd libretto, stilted dialogue, and several fine songs, on the strength of which this recording is surely welcome. The Grofe scoring is used (Vodery's is apparently lost), but the elaborate wind doublings have been simplified. Neat enough, the performance is somewhat short on panache.
The verso of the Turnabout record digs into several corners of the Gershwin catalog, for the two "madrigals" from the film A Damsel in Distress, two songs, and—best of all—a stretch from Let 'em Eat Cake, the sequel to Of Thee I Sing. Though unsuccessful in its day, this was one of Gershwin's most ingenious and highly developed scores, and it's good to hear even this little bit: the hit song, "Mine," preceded by a choral sequence; the orchestration is by Smith, the original (not by Gershwin) having disappeared. I don't much care for Rosalind Rees's rather adenoidal, deadpan renditions of the songs—especially the witty "By Strauss," which many will remember as memorably sung (with a slightly altered verse) by Georges Guétary and Gene Kelly in the film An American in Paris. The other numbers are done efficiently, if no more. No texts are given, except for a few lines from the Let 'em Eat Cake scene: though the diction is pretty fair, one could have used the texts now and then.

**GERSHWIN: Porgy and Bess**

- Porgy: Dannie Reily (b) 
- Bess: Clamina Dale (s) 
- Serena: Wilma Sattler (s) 
- Clara: Betty Latt (s) 
- Lila: Myra Merritt (ms) 
- Mingo: Harry Baskin (t) 
- Sportin' Life: Larry Marshall (t) 
- Undertaker: Cornel Richey (t) 
- Jake: Andrew Smith (t) 
- Alexander: Frank McElroy (t) 
- Jim: Carroll Moore (b) 
- Leather: Bernard Thacker (t) 
- Undertaker: Cornel Richey (t) 
- Sportin' Life: Larry Marshall (t) 
- Jake: Andrew Smith (t) 
- Alexander: Frank McElroy (t) 
- Jim: Carroll Moore (b) 
- Leather: Bernard Thacker (t) 

*Children's Chorus, Orchestra, and Ensemble: John DeMain, cond. [Thomas Z. Shepard, prod.] RCA RED SEAL ARL 3-2109, $23.94 (three discs, automatic sequence).*

**GERSHWIN: Vocal Works**

- Soloists: Gregg Smith Singers, orchestra, Gregg Smith, cond. Turnabout TV-S 34638, $3.98. Tape: CT 2103, $6.95.

Blue Monday (155th Street) (Joyce Andrews, soprano; Thomas Bogdan and Jeffrey Meyer, tenors; Patrick Mason, baritone; Walter Richardson, bass, orchestra); A Damsel in Distress: The Jolly Tar and the Milkmaid; Sing of Spring (Singers, Oresta Cygonowski, piano); Ming Toy; in Mandarin's Orchard Garden; Roses; Cygnowski, tape. The Show Is On: By Strauss (Rees-Cybriwski). Let 'em Eat Cake: Orders, Orders ... Mine (Bogdan; Priscilla Magdlin, alto; Singers, orchestra).

**Weingartner, Kleiber, De Sabata: A Matter of Record**

By Harris Goldsmith

Jet travel has homogenized the world of music, and we tend to forget that until recently performers of the first rank could have primarily American or European reputations (and the Orient was considered an exotic no-man's-land). Thus, while Felix Weingartner, Erich Kleiber, and Victor de Sabata—three prominent conductors heard in impressive recent reissues—appeared before American audiences, all three belonged generally to the "European" camp.

The Dalmatian-born Weingartner (1863-1942), a one-time pupil of Liszt, appeared with the New York Philharmonic in 1905 and conducted Tristan in Boston in 1912-13. He made his (apparently controversial) presence felt in opera, spent most of his later years symphonically in the concert halls of London, Vienna, and Paris, was an esteemed pedagogue and frustrated composer, and died in Switzerland, self-exiled from Nazi Europe. His books on conducting are widely read, and phonographic annals will forever honor him as the man who recorded the first cycles of the Beethoven and Brahms symphonies.

Kleiber (1890-1956) and De Sabata (1892-1967) were also fine opera conductors, and De Sabata was, like Weingartner, a composer. Both were active in the U.S. in the 1920s, and though each reappeared here after the war—Kleiber conducting the NBC Symphony at Toscanini's invitation, De Sabata leading the Pittsburgh Symphony and the New York Philharmonic—neither remained on the scene long enough to become a superstar along with such European transplants as Reiner, Szell, Beecham, Walter, Koussevitzky, Mitropoulos, Ormandy, and Toscanini.

Many reputations have, of course, been made through phonograph records—Furtwängler and Scherchen are cases in point, and so, for that matter, are Furtwängler and Mengelberg, whose present, largely posthumous celebrity in this country has little to do with memories of their live performances. Much the same could be said of Weingartner. Kleiber's fading repute may well be restored by the emergence of his son Carlos; he left many fine recordings to further the cause. De Sabata, however, was forced by poor health to retire early; since he left but a handful of records, he must remain a relatively shadowy figure.

Both in the opera pit and in the concert hall, De Sabata had the reputation of a brilliant showman and an enticing sensualist. He was also an erratic interpreter, as is evident in the reissued performances, which range from incandescent to superficial and perverse.

His 1946 London Philharmonic accounts (in a two-disc London Treasury album) of Sibelius' En Saga,
Berlioz' *Roman Carnival Overture,* and Wagner's "Ride of the Valkyries" are as supercharged as Toscanini's and often, as in the supplely molded introduction to the Berlioz, more flexible; indeed his *En Saga* unleashes an almost orgiastic outburst. By any reckoning, these performances are masterfully led and, for their time, remarkably realistic-sounding. The Sibelius *Valse triste* is also tenderly done, although a bit mannered in its rubato.

De Sabata's *Eroica* from the same sessions is, on the whole, of the self-indulgent school of Mengelberg, Koussevitzky, and Pfitzngler—but with- out their compensating energy and conviction. From the outset the sonority is inappropriately luscious and, virtually every trace of rhythmic ostinato is given a soft-focus treatment that softens outlines until the whole first movement resembles the *Liebestod.* The *Marcia funebre* is less listless, but I find the conductor's chosen sonority inappropriately glossy and superficial. The last two movements are better: a lively enough scherzo (with the trio taken pretty much in tempo) and a quite live finale.

A much better case for De Sabata as a Beethoven interpreter is made by his *Pastoral* (reissued on British EMI's World Records label), recorded in Rome a year after the items in the London Treasury set. The Augusteo Orchestra (later renamed the Santa Cecilia Orchestra) doesn't have the easy blend of the LPO, and there are one or two instances of uncertain ensemble. While I question De Sabata's expansions at several points—notably at the end of the finale—this is a suave, super-intense, Latinized reading, often similar to Toscanini's NBC version and, in the woodwind department especially, often more bucolic and more lovingly phrased by the Italian instrumentalists. The reproduction is a shade less opulent than that of the London performances, but there is more finely etched detail.

Many of Kleiber's Beethoven recordings I had not heard for some years until recently, when I listened to all of them again, rediscovering just how distinguished they are. His *Eroica,* for example, is one of the few that can rival Toscanini's for slashing, nervous momentum.

The 1955 Vienna recording is Kleiber's second *Eroica.* The earlier one (with the Concertgebouw), originally on 78s and an early London LP, has never been reissued. Actually one might say that the Vienna recording has only been reissued: It first appeared several years after the conductor's death, on the budget Richmond label.

The reason for its delayed appearance has never been clear. Could the exacting Kleiber have been unhappy with the sound of the orchestra, which is clear and incisive but also unpleasantly thin and acerbic? The Concertgebouw recording had a more dated but also more mellow tone quality, and, judging from the old Richmond reissue of the contemporaneous Concertgebouw Seventh, London might have gotten a more agreeable sound by restoring the Concertgebouw rather than the Vienna *Eroica.* Both performances have their points of interest. The later one, which includes the long exposition repeat (in the new mastering London has fit the first two movements uninterrupted on Side 1: the *Marcia funebre* had a side break on Richmond), is perhaps slightly more unified and intense.

Kleiber's famous 1953 *Fifth* has survived its compression to a single disc side fairly well. The Concertgebouw strings seem a bit edgier now, but detail remains exemplary and the brass sounds full and lustrous. This is remarkably fine engineering for its period and—save for the lack of stereo—sounds no more antiquated than, say, the reissued Szell/Cleveland performance on Odyssey.

The first three movements are led with terse conci-
sion; rhetorical gestures are virtually eliminated, and
the whirlpool of inspiration leaves a smacking sting in
its aftermath. The finale still disappoints me some-
what: despite its properly majestic beginning, it is
static and detached compared with the volcanic drama
and energy that Toscanini (in his 1943 recording)
and Cantelli (in his 1954 NBC Symphony broad-
cast) managed at a similar pace.

The coupling for the Fifth. Kleiber's 1949 London
Philharmonic version of the Mozart Fortieth Sym-
phony (which also turned up recently in Turnabout's
'Great Mozart Conductors' set, THS 65033/3), is an-
other distinguished albeit controversial interpre-
tation—one might call it "astringent" rather than
"demonic." Kleiber sets brisk, vehement tempo and
seems intent on maintaining the tension even tighter,
at the same time eschewing the surging operatic quality
sought by Casals and Toscanini in favor of clipped,
detached phrasing and a pure, cool, treble-oriented
sonority. The outer movements work best; the min-
uet seems rushed and impatient. In line with his clas-
sical outlook, Kleiber uses the symphony's original
version, without clarinets, but his omission of the first-
movement repeat is surprising. The sound is
clear but a shade strident, and there is some scratch
from the original shellac discs.

With Kleiber's Pastoral and Seventh yet to reappear
(in the case of the former, I hope we will get the later
Concertgebouw recording rather than the London
Philharmonic one), that brings us to his Ninth, heard in interesting juxtaposition with Turnabout's
reissue of the 1935 Weingartner Ninth, which it
strongly recalls.

The propulsive first movement is taut and intelli-
genous, though it lacks the fire and thrust of Tosca-
nini's. The scherzo (without repeats, like Weingart-
ner's) is clear and a bit prim: the timpani mark their
rhythm neatly but never rise above chamber-music
dimensions. The Adagio (broken at a judicious point
in this single-disc format) has a good sense of motion,
and the finale, after a strangely small-scaled, met-
ronomic delivery of the instrumental recitatives, is
admirably done. The vocal quartet—Hilde Gueden,
Sieglind Wagner, Anton Dermota, and Ludwig
Weber—is particularly eloquent. The 1952 recording,
though several years older than the Eroica, is much
more flattering, though the Vienna Philharmonic strings
may not be Kleiber at his greatest, but it is none-
theless a distinctive performance.

Weingartner's Ninth was a landmark recording in
its day, and it comes out even more impressively in
this splendid reissue. The ominous rumbling bass of
the original 78s and the first Columbia LP transfer
has been tamed, and timbres have been solidified
and brightened considerably—note the rustle of the
strings at the beginning of the first movement and the
solid, compact sound of the cellos at the beginning of the
Allegretto scherzando of the Eighth, that fa-
mous jibe at Malzel's metronome, gets off to a lurch-
ing start, giving an ironic twist to Beethoven's humor
that Weingartner undoubtedly never intended.
There are other imprecisions and vacillations, but
Weingartner brings out quite a bit of relevant detail
and mixes it with a genuine sense of genius and
engagingly.

BEETHOVEN: Symphony No. 3, in E flat, Op. 55
(Eroica). BERLIOZ: Roman Carnival Overture, Op. 9
WAGNER: Die Walküre: Ride of the Valkyries.

BEETHOVEN: Symphony No. 6, in F, Op. 68
Pastoral. ORAsto: Symphonic Symphony No. 6,
No. 9, in D minor, Op. 125.

BEETHOVEN: Symphony No. 4, in B flat, Op. 60.
SCHUMANN: En Saga, Op. 9; Valse triste, Op. 44.

BEETHOVEN: Symphony No. 4, in F, Op. 64.


BEETHOVEN: Symphony No. 4, in G minor, Op. 96.

BEETHOVEN: Symphony No. 3, in E flat, Op. 55
(Eroica). Vienna Philharmonic Orchestra, Erich Kleiber,
cond. LONDON TREASURY R 23202, $3.98 (mono) [from
RICHMOND B 19061, 1959. recorded 1955].


BEETHOVEN: Symphony No. 4, in G minor, Op. 96.


BEETHOVEN: Symphonies: No. 8, in F, Op. 93. No. 9 in
D minor, Op. 125. Louisenne Wagner, soprano; Rosette
Anday, alto; Georg Maikl, tenor, Richard
Mayr, bass*; Vienna State Opera Chorus, Vienna Phil-
harmonic Orchestra, Felix Weingartner, cond. TURNABOUI THS
65076/7, $7.96 (two discs, mono, manual sequence) [from
European COLUMBIA originals, 1935-36].
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That was fine. Not so fine, however, was our resulting reputation for being very expensive. Thus, many audiophiles were deprived of enjoying LUX quality and performance simply because they were unaware of our less expensive products.

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He does little that isn't mentioned in some baroque treatise on performance practices, but large questions are raised—and scarcely answered—by his use in Bach's organ music of basically foreign conventions (such as those of the French harpsichord literature). Even allowing for these significant questions, Newman's musical ideas—many of which, taken by themselves, are both creative and eminently supportable—would have been much more persuasive had they been applied with more discretion. It is precisely this lack (to my mind) of discretion, of subtlety, of that basic and elusive quality which found their way onto Columbia records one of the most trying musical experiences I can remember.

First of all, Newman seems often to cultivate velocity for its own sake: notes fly by at such dizzying speed that the mind cannot perceive even a gestalt of broad melodic and harmonic contours. Some particularly egregious instances occur in the big F. minor Prelude, in which some of the figurative passages are so rushed as to sound merely trivial. Far worse than the overdriven tempos are Newman's often gross exaggerations of agogic accents—thereby destroying all sense of an integral tactus—and the hugely overdone rallentandos at the ends of pieces. So drastic are the tempo fluctuations at the beginning of the A minor Prelude that one honestly wonders whether Newman will make it to the end. Too, he has a maddening habit of playing different sections of a work at different tempos that have no relationship among themselves.

Registrations are often similarly unfortunate. We hear too much of a brutal plenum sound that lacks either charm or historical authenticity. As a secondary sound to alternate directly with the plenum, Newman sometimes resorts to mere flutes at eight- and four-foot pitches, producing such an extreme dynamic change that whole measures are lost for the hearer as his ears readjust. With all, there are too many kaleidoscopic stop changes in irrational places, providing anything but illumination of textures, forms, and structures. All this is made worse by Newman's choice of instrument, a two-manual, twenty-three-stop, mechanical-action organ built in 1974-75 by Henderson and Wilson. Some of the softer sounds (which we hear all too rarely) are pleasant enough, but the searing plenum is dominated by brash, pseudo-French reeds and screaming mixtures. The vivid recording does nothing to flatter the instrument, making it sound that one honestly wonders whether Newman will make it to the end. Too, he has a maddening habit of playing different sections of a work at different tempos that have no relationship among themselves.

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real pleasure to turn to Lionel Rogg's new Bach recordings on Angel—drawn from his latest complete Bach cycle (his third), as is the recent Seraphim disc (S 60245) of the organ concertos. For these performances, he has chosen newer classic-style instruments by such present-day builders as Marcussen and Metzger.

These performances, which mostly represent the best of contemporary ideas on playing Bach, will only strengthen Rogg's enviable reputation. He has a particularly compelling sense of rhythm that, while admitting the most elegantly handled agogic accents, maintains a strong and steady forward motion. In the Fantasia in G minor he projects just the right degree of freedom within an insistent rhythmic impulse, and the result is singularly exciting. So accomplished is his handling of rhythm, in fact, that Rogg even makes a persuasive case for that old warhorse, the D minor Toccata and Fugue. What is perhaps most astonishing is that he can make even monophonic lines and repetitive figurations so interesting, as he does in the Toccata, Adagio, and Fugue in C and the G major Fantasia. Rogg is rather more conservative about registration than, say, Michel Chapuis (whose Bach integrale is available here on Telefunken). But one sometimes longs for a bit more color, but almost everything is logical and tasteful. My only real disappointments are that he eschews the manual changes clearly implied in the echo effects of the G major Fantasia and that he eschews for the adagio color, but almost everything is logical and tasteful. My only real disappointments are that he eschews for the adagio color, but almost everything is logical and tasteful. My only real disappointments are that he eschews for the adagio color, but almost everything is logical and tasteful. My only real disappointments are that he eschews for the adagio color, but almost everything is logical and tasteful. My only real disappointments are that he eschews for the adagio color, but almost everything is logical and tasteful. My only real disappointments are that he eschews for the adagio color, but almost everything is logical and tasteful. 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was a little pugnacious and the voice less freely produced than Van Dam's. Anna Totova-Sintov gives her fifth-movement solo much the same flutelike purity that Gundula Janowitz brought to the DG recording, but her timbre too seems a trifle warmer and fuller.

In sum, Karajan has done it again: This is as fine a German Requiem as can be found in the catalog. It should be noted, however, that Klemperer's equally impressive, somewhat more stately strophic performance has been available for some five years in England in a remastering clearly preferable to the Angel edition. Klemperer brought out some uniquely interesting details of brass writing in the second movement, and this transfer has unearthed much illuminating commentary from the woodwinds; over-all brightening gives a cleansed, strengthened reevaluation of this muscular and unaffected but greatly affecting interpretation. With the Requiem compressed from four sides to three, the English set also includes the impressively granitic Klemperer accounts of the Tropic Overture and Aho Rhapsody (with Christa Ludwig as the fine soloist).

I am less enthusiastic about the fillers in the new Karajan set. The conductor has never had much luck with the Tropic Overture. His earlier version, with the Vienna Philharmonic for London, was hobbled by exaggerations of tempo and accent. The new reading, less mannered, is nonetheless an interesting one: the second movement is slightly less deliberate Variation No. 2 position, writing that the equally important tensile qualities of the phrasing simply vanish into gossy amorphousness. The Hoydn Variations are far more successful, in fact quite exquisitely shaped and colored. Yet, as with the comparison with the 1962 performance in the DG set shows, Karajan's tempos have become a shade slower, making the already slightly deliberate Variation No. 2 positively angular and sedate, dullying the mercurial quality of the shoulders of Variation No. 5 and the festive No. 6, and lending an aura of constraining torpor to the exultant final peroration.

H.G.

DELIOUS: Concertos: for Violin and Orchestra, for Violin, Cello, and Orchestra. Yehudi Menuhin, violin; Paul Tortelier, cello; Royal Philharmonic Orchestra, Meredith Davies, cond. [John Mordler, prod.] ANGEL S 37262, $7.98 (SO-encoded disc).

The violin concerto (1916) not only is the finest of Delius’ four concertos, but belongs among the half dozen or so basic masterpieces with which to start a Delius library. Although discernibly subdivided, its single movement is a dreamy, mellotone romantic rhapsody that is like the outcry of a wounded bird in the midst of sun-drenched, exotically beautiful marshlands. It is not without opportunities for pyrotechnic display, but it is one of those works whose basic quality is a rarefied, inward, and fuller sound. (Chopin’s seine and Vaughan Williams’ Lark Ascending would fit nicely as disc mates.)

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The violin/cello concerto of the previous year (1915) isn’t quite at that level but has breathtakingly lovely moments. It is built in three interconnected sections (with cyclic treatment of the melodies) and draws on a martial idea (said to be a “tolling bells” comment on the First World War) and some expressively lyrical subjects. The work’s big problem is that Delius just wasn’t adept at blending the solo characters of violin and cello, and in fact wrote more effectively for the latter instrument in the 1917 cello sonata and the 1920 cello concerto.

Menuhin’s leisurely and soulful treatment of the violin concerto, with discreet, sympathetic support from Meredith Davies and the Royal Philharmonic, can’t help but win new adherents, at the same time pleasing those who’ve long waited for a modern recording as authentic in spirit as either of EMI’s Forties recordings—the genteele, old-fashioned Sammons/Sargent on Columbia (currently available on World Records SH 224) and the more propulsive Pougnart/Bécham on HMV. Close calls there may be at times, but the soloist’s technique does hold up. Menuhin and Tortelier are a well-mated team in the double concerto, and both performance and recording improve substantially over the only previous version, on Iye. I did, however, note some sonic fuzziness in the duet concerto that wasn’t conspicuous in the violin concerto.

A.C.

DUSSEK: Sonatas for Piano, Vols. 1–2. Frederick Marvin, piano. [Robert F. Commagere, prod.] GENESIS GS 1068* and 1069*, $7.98 each.


These two discs begin a projected series of all the sonatas by Jan Ladislav Dussek (1760–1812), a fine composer who had the misfortune of being overshadowed by Beethoven, Mozart, and Schubert. Like Clementi, he is best known for the sonatinas he composed for pupils and wealthy patrons, the more substantial compositions in both cases having fallen into undeserved limbo. As the four works on these discs—two of them early, two later—show, Dussek, although he was a fine craftsman, made a rather remarkable transition from a nimbly classical, tidy, but somewhat superficial style to something altogether more profound and personal. The two mature sonatas are expansive, are full of unexpected colors and harmonic turns, and carry seeds of the Romantic movement soon to take wing in the music of Weber and Schumann.

Frederick Marvin is a deeply introspective sort of player, and he has been given distantly miked, low-level recording that builds atmosphere, and he will carry off these ravishing pianissimos and even mutes the impact of louder passages. Unfortunately, the potential magic of his performances is sometimes marred by noisy pressings—a pity, since there is obviously fine sound on the master tapes.

Comparison with the recent Firkusny version of Op. 77 (on Candide CE 31086, a collection of Bohemian classical keyboard music) is instructive. Firkusny’s timing of 22.57 as opposed to Marvin’s 35.12 seems almost too great a difference to believe. Firkusny omits the exposition repeat in the first movement and takes a considerably tougher, brisker (but by no means insensitive) view of the music. Since his swifter, tighter reading also benefits from a closer, more impactive (and impressively sonorous) piano recording, listeners coming "cold" to this music would probably get a more immediately positive impression from this extroverted version. But the importance of Marvin’s project cannot be denied.

H.G.


One of the happiest recent developments for collectors of organ records is the agreement whereby the American Delos label will be releasing some of the outstanding organ recordings being made by the French FY label. This arrangement promises the six organ symphonies of Vierne recorded at Notre Dame by Pierre Cochereau as well as a complete Bach cycle by the brilliant young American George Baker. And it has already produced some remarkable albums of organ works by Dupre, Milhaud, and an American-music anthology. These initial releases are all distinguished by exciting, playing, recorded sound that is at once incisive and atmospheric, and immaculate pressings.

Such is emphatically the case with this Hindemith album, which offers one of the most vivid organ recordings in memory. The 1969 Alfred Kern organ in the Church of St. Maximin at Thionville, France, is exemplary of the very finest contemporary organ-building, and its luxurious sonorities are perfect for the music. “The voicing, as I've said this morning, is like the morning dew, but not rough; full, but not overpowering.” The acoustical setting is most lavish, but the recording maintains a perfect balance between intimacy and spaciousness, and the bass frequencies have been captured with especial solidity.

Baker uses the instrument’s resources with the utmost sensitivity, and his playing
is both assured and refined. His tempos are sometimes a bit brisk (as in the first movement of the Second Sonata) but scarcely more so than Simon Preston's on Argo (ZRG 663). Indeed, while both Baker and Preston offer superb performances, it is the Delos album (and its demonstration-quality sonics) that I expect to be returning regularly.

S.C.

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\[ \text{TCHAIKOVSKY SYMPHONIES} \]

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— Rostropovich

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The sonatas come off best, although Deutsch's account cannot compare with the better versions already available. They are sluggish (even when tempos are fast) and undisciplined, in regard not only to details, but to the larger shape. To cite one only example, the presto section at the end of the fourth movement of the First Sonata, which should sound like the culmination of a long process of rhythm and dynamic intensification, lacks force and excitement.

Among the shorter works included, the most interesting are the four Emerson Transcriptions, previously unavailable on disc. Each of these is a sort of spinoff from the first movement ("Emerson") of the Concerto, taking off from—or gradually working toward—an idea from the sonata and developing it in a different way. (Actually, this description really only applies to the first and third transcription, as the other two are virtually identical to sections of the Concerto, at least in the basic musical substance.)

There are also a couple of early pieces from Ives's Yale days (played in a very perfunctory manner), an extremely interesting waltz (a title that gives little indication of the true nature of the piece), and one of the Five Take-Offs. The piano arrangement of the Variations on "America," already mentioned, doesn't work well. Essential parts of the original must be omitted, including frequently the bass line, which results in a complete—and fatal—alteration of the underlying harmonic structure.

For comparison, I would suggest Alan Mandel's Desto recording of the "complete piano works" (DC 6548/61). Although no more "complete" than the present set (interestingly, the only works the two sets share are the two big sonatas and the short Three-Piece Sonata), it does contain more music, and Mandel's performances are very good. Desto's sound much clearer. P.R.M.

LECCO: La Fille de Madame Angot—see Offenbach: La Grande-Duchesse de Gérolstein.


Reviewing the Kegel/Leipzig recording of this Mass (Philips 6800 866. December 1975), I mentioned the long-held doubt that a boy not yet thirteen could have composed such an accomplished, highly expressive, and dramatic work—a doubt that had led scholars to advance its date from 1768 to 1772. Even so, one could hardly believe that a sixteen-year-old would be capable of such maturity and inventiveness. But modern musicology has unequivocally established that this is indeed the so-called Orphanage Mass composed in 1768, and K. 139 was changed to K. 47a, all of which goes to show that (fortunately) the roots of creative power are and will remain a mystery even in the age of psychiatry.

Despite the high artistic quality of most numbers in this Mass, the conductor is faced with a most difficult task because of the multiplicity of styles. Mozart, with his seismographic sensitivity, could absorb any idiom overnight and immediately use it with natural ease. Thus we have in this Mass pretty nearly everything current in Italian and Austrian music: languid Neapolitan cantilena, coloratura aria, fugue, and startlingly somber drama (as in the "Crucifixus," with its ominous muted trumpets), each number as an entity representing one prevailing fashion. Moreover, it is quite obvious that the young composer wanted to demonstrate his prowess, and the sensitive consecration of the orphanage in the presence of the empress and her court offered a good opportunity for such a demonstration. Mozart also welcomed the fine large orchestra maintained by the orphanage, using three trombones, four trumpets, and drums in addition to the standard pre-classical orchestra. What the twelve-year-old could not do was to compose an entire Mass as a stylistic whole; it is the conductor who must somehow pull together this little musical art gallery into a semblance of unity. (Curious that this supreme stylist did not attain a true liturgic-idiomatic unity in his Masses until the very last one, the Requiem.)

Claudio Abbado does a commendable job. Apparently he decided against achieving homogeneity by toning down the galant element and emphasizing the serious aspects of the music. He leaves the way performers deal with the contradictions of eighteenth-century symphonic church music. Instead he presents every section of the work faithfully in whatever its style and does it so well that our pleasure in hearing good music well performed considerably lessens the constant surprise at being tossed from Hasse to Gluck, with Eberlin in between. He is assisted by an exceptionally compatible solo quartet, a solid chorus, and the Vienna Philharmonic, which needs no encomium. The sound is good, though there is an echo that affects the choral fortissi; the unused organ also contributes to this slight thickening of the sound. But this is a fine, interesting, and enjoyable recording. P.H.L.

NOLICAI: Die lustigen Weiber von Windsor

Frau Fluch Anna Reich
Frau Frau Reich
Frunzel Peter Schreier
Sprecher Karl Ernst Merckner
Stern Henrich Flath
Sir John Falstaff
Kurt Moll
Siegfried Vogel
Heinrich Reich
Claude Dompay
Dr. Casel
Hermann Strassburger
Narrator

Berlin State Opera Chorus, Berlin State Orchestra, Bernhard Klee, cond. [Eberhard Geiger and Rudolf Werner, prod.] Deutsche Grammophon 2709 065, $23.94 (three disc manual sequence). Tape 33 702, $23.94.

Of at least nine operas based on Shakespeare's The Merry Wives of Windsor before Verdi's Il Matrimonio Segreto was composed into the modern repertory, and that primarily in the German-speaking countries. Otto Nicolai's Die lustigen Weiber von Windsor.
first performed at the Berlin Court Opera in 1849. Nicolai and his librettist Hermann S. Mosenthal took Shakespeare's potboiler at pretty much its own level of bourgeois farce, deriving from Henry IV any deeper aspects of the fat knight's character. In fact, the merry wives (only two of them, for Quickly is dropped) are the center of attention in this version. Sir John remains essentially the butt of their practical jokes, rather than Falstaff's and Verdi's richly sympathetic portrait of good-humored rascality. The romance of Fenton and Anne Page (Anna Reich, in the German) is prominently and more conventionally displayed, with Falstaff's two rivals, Slender (Sparlich) and Dr. Caius (who in Verdi lost his French background and accent), both present—not here the enchanting way in which Verdi's young lovers flicker in and out of the central umbrage for barely seconds at a time.

The action begins with the equivalent of Verdi's second scene, the wives comparing their husbands' behavior (from Falstaff) and proceeds rapidly to the laundry-basket episode. Nicolai's second act picks up the interview between Ford (Fluth) and Falstaff, shows us Anna and Fenton in love with the Erliness of the exchange between Ford (Fluth) and Falstaff's second valet for his wife: the knight is snuggled out in woman's clothes and suffers a beating on the way. In Act III, the Windsor Forest masquerade is planned and Anna devotes an exchange of costumes to bring about the wedding she wants rather than either of the suitors. The final scene, in the forest, corresponds to Verdi's. There's more of Shakespeare's plot in this version, and not always to the good. The first two acts end rather similarly, and one can help feeling that Boeing was wise to trim out that second prank. Still, Mosenthal's libretto provides ample activity and reasonable novelty, onto which Nicolai has poured more than a modicum of really expert music. The most ingenious pages are those of the final scene—most of the material introduced in the light-fingered and justly popular overture and then reserved for the evening's end fairy music in the vein of Weber and Mendelssohn, bright and elegantly scored. Fenton's hokey serenade is another famous number, leading to a gently passionate love duet with obbligato solo violin and then to a bouncing gavotte. The slightly-curved bottom surface of each AT605 flattens as weight increases so that only the right number and size of resilient rubber projections support your equipment. Four insulators support up to 36 lbs. (9 lbs. each). The felt-covered upper support is easily adjusted for accurate leveling. A precision bubble level is included. And each unit is enclosed in an attractive brushed chrome housing. If feedback limits the quality of your system, or restricts your choice of equipment location, the AT605 Audio Insulator System can help. At all Audio-Technica dealers for just $24.95 suggested retail. Win the fight against feedback today!
something to do with one aspect of the ferocess. Peter Schreier, in particular, hardly ever sings softly enough, which rather spoils the effect of his serenade, and Bernd Weikl, in the duet with Falstaff, is persistently shallow in tone, even when he ought to be conciliatory.

The DG cast has some definite strengths. The two merry wives are vocally firmer than their opposite numbers, though also less characterful because less rhythmically alert. In earlier days, there were Franck's who combined both qualities: Try Margarethe Siems on Rocco 20 or Erika Wellerkind on Rocco 25—both fluent and witty, with some brightly voiced extra calenades—or Lotte Lehmann on Electrola 1C 147 281,6/7. Most vivacious of all despite some rough going in the coloratura, Edith Mathis seemed better suited, indeed, to the more placid Anna, which she sang for Electrola, a bit more smoothly than DG's Helen Donath.

Kurt Moll, in splendid voice, could hardly be bettered as Falstaff: it's a rich, steady, even instrument, and his sense of humor is rather lighter than Gottlob Frick's (the latter, by the time of the Electrola recording, could on occasion sound somewhat ossified). In neither performance, curiously, do Fluth and Falstaff succeed in making much of the lengthy recitative preceding their duet (one of relatively few extended bits of recitative in the opera): to hear how delightful this can be, go back to 1903, when Wilhelm Hesch and Leopold Demuth went at it with all the variety of pace and inflection that one expects from Gielgud and Richardson (Court Opera Classics CO 333).

Schreier's deficiencies have been mentioned, and it must be added that he is in competition with the late Fritz Wunderlich, who may love his high notes rather more than he should—but then they are pretty irresistible. Wunderlich's recording of Fenton's serenade is excerpted domestically on Seraphim S 60043, but an even lovelier version was made by Peter Anders in 1997, doubled half a tone high on Telefunken HT 25 (now out of print), this displays the ideal of liquid German lyric tenor sound, and is phrased with masterly ease and directness.

The smaller roles in both casts are competently taken. DG offering the bright idea of a real Frenchman to sing Dr. Caju, for an absolutely authentic accent. Bernhard Klee keeps things moving along well, and the orchestra does good work for him, especially in the overture. But Heger's boys are even better, and the old master, taking a more relaxed view of the score, succeeds in bringing it to a bigger, more colorful climax in the sparkling last scene. Against this, you might want to weigh the fact that Heger makes a number of "standard" cuts (not, I think, a disastrous loss), and that Electrola gives a libretto only in German (a real problem because of all that dialogue).

But you might also want to consider the fact that this still another new recording of the opera is on the stocks, for London, with Rafael Kubelik conducting and Karl Ridderbusch as Falstaff. Perhaps caution is in order.

D.H.

OFFENBACH: La Grande-Duchesse de Gérolstein.
heard on these recordings, and that just isn't good enough. Offenbach requires attractive, freely used voices to realize the special qualities that underlie the deceptively simple writing in his operettas. Is it such a large leap, after all from Perichole's letter song to Antonio's "Elle a fu?"

Eraton's Perichole. Regine Crespin, is of course an artist of proven sensitivity, but her problem is primarily vocal. That the instrument is seriously out of balance has been clear for some years, but the problem has not yet been remedied by the addition of new voicessing. only which highlights the relative weakness of her chest voice. Indeed I find her more at ease as Perichole, a soprano role, than as the Grand-Duchess, a mezzo role. Both Alain Vanzo and Charles Buries are serviceable tenors, the latter's lighter, somewhat smoother sound the more agreeable. I have heard worse than both, but I would hope for something better than either. An instructive sign of the times is the miscasting of Robert Mастер as General Bonin in Grande-Duchesse—one of the most memorable protectors in these sets (especially in the spoken dialogue). But are there no basses in France?

Columbia scores highest in presentation. Grande-Duchesse is performed with much spoken dialogue as the crammed disc sides will allow—the old Lobowitz recording included none of it, but at the expense of heavy musical cuts—and the booklet contains text and translation (The omitted dialogue, however, is not printed, which means that one must refer to the plot synopsis to fill in some plot gaps.) Connoisseur Synchro's More-Musical set sides too are well filled, but no printed texts are provided. (There is a detailed plot synopsis.) Erato has scrapped the dialogue of Perichole in favor of narrations by Alain Decaux: since this makes it impossible to succeed the eponymous founder is conductor. and toward the end of his life, to record many of his works. "Of the 10 settings, he has ever written."


Gabriel Piéron (1863-1937) is one of those unfortunate composers fated to be known (outside his own country) almost exclusively for a Pops-encore triflet in his case the Entrance of the Little Fauns episode. But he was important enough in his own day to succeed Franz as organist at St. Clotilde to succeed the eponymous founder as conductor of the Concerts Colonne, and toward the end of his life, to record many of his own works. Among these were the first of the two suites drawn from his highly successful pastoral ballet Cyndale et le chevre-pied (1919-1920), from which the Little Fauns episode is drawn, and the Basque folk-theme overture drawn from the incidental music to Pierre Loti's Ramuntcha. It is good to have them (now augmented by the vary useful Cyndale suite) back in the recorded repertory—not only as a more adequate representation of Piere than we have had lately, but for the distinctive balletic grace and theatrical effectiveness of the ballet music, the breezy freshness of the Basque airs and dances and the imaginatively kaleidoscopic or chaotically flowing through them. These still vivid and piquant attractions are all persuasively enhanced by beautifully transparent Pathe-Marconi recording (first-rate in stereo only play back, even in quadraphony) of Jean-Baptiste Maillot's authentically folkloric performance. He's a new conductor to me and to most American listeners no newcomer but a veteran tubaist and cellist turned conductor for the encouragement of Charles Munch. The present examples of his

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May Night is one of the several popular Russian operas (Mussorgsky's Fair at Sorochinsk, Tchaikovsky's Cherivichki, and Rimsky's own delightful Christmas Eve are others) drawn from the youthful Gogol's set of Ukrainian tales. None has ever established itself in Western repertory, doubtless because literature and stage works based on folk superstitions and traditions, and on colloquial rural humor, make cross-cultural transferences rather badly. Yet while May Night is by no means one of Rimsky's major operatic creations, it is a piece of definite theatrical charm and many musical beauty; I should think that a production that found some equivalent for the work might prove enjoyable to American audiences.

Meanwhile, it is pleasant to have a recording domestically available. As is the case with so many contemporary Soviet recordings that replace older mono sets, this performance doesn't have quite the vocal expertise, or the sense of something extra-special in the important character roles, to be found on the earlier recording by the Bolshoi (MK 05404/9—for some commentary on this performance, see Part II of my Russian opera discography, HF. January 1975). But the quality gap is narrower than in most such instances, and since the set also offers some of the better Soviet stereo sound and fine DG pressings, it is surely recommendable.

Inasmuch as the heroine rather fades from the scene after Act I and the several important character roles (Krivchenya, Levko, the Mayor, etc.) May Night depends for its musical effectiveness largely upon quality in the romantic tenor lead, Levko, and in the orchestral playing. These two elements are strong in this performance, though always in the rather foursquare fashion (little attention to rubato or to dynamic shading) characteristic of the current generation's renditions of nineteenth-century opera, East or West. The tenor, Konstantin Lisovsky, is new to me. He has a fine, ringing voice of almost heroic contour, but with more spin and fluidity than is usual in Slavic voices of the form—it is well centered, has clean vowel formation, and moves fairly smoothly through the break. One can hear a splendid Dmitri or Ghermann in the voice, and perhaps some of the spinto or dramatic Italian parts as well. He sings with less variety and blandishment than did the more lyrical Sergei Lemeshev on the earlier recording, and doesn't seem able or inclined to deal much in the softer dynamics, but he sings a firm line, is not clumsy, and has some excitement up top—I hope we'll hear more of him.

The orchestral performance is similar to the earlier one. The execution is good. The percussion sounds are clear and direct, there is plenty of life, and altogether there's nothing to complain of unless one is looking for the extra color sensitivity, the final flexibility in tempos and phrasings, that can impart real magic to a medium-weight mezzo as the maiden finally released from her watery enchantment by Levko in Act III; Anna Matushina, on the other hand, is in the most acidulous tradition of Russian character sopranos—as with some of our musical-comedy performers, this sort of sound must convey something to Russian audiences with respect to a character type, but is just about unintelligible on any other grounds.

The role of the Mayor is in the hands of Yuri Yelnikov and Gennady Troitsky are both adequate to their more modest assignments, though the former does not equal the very amusing work of Shevtsov in the important character roles. He sings with less variety and sagacity one might expect of him, along with more vocal solidity than his recent recordings had led me to expect. Ivan Budrin's Kalamnik is another clever, vocally robust performance.

Yuri Yelnikov and Gennady Troitsky are both adequate to their more modest assignments, though the former does not equal the very amusing work of Shevtsov in the older performance. The choruses are strong, the engineering clean and straightforward, but is just about unintelligible on any other grounds. The role of the Mayor is in the hands of Yuri Yelnikov and Gennady Troitsky are both adequate to their more modest assignments, though the former does not equal the very amusing work of Shevtsov in the older performance. The choruses are strong, the engineering clean and straightforward, but is just about unintelligible on any other grounds.
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September 1977
It happened that, as the initial releases on the HNH Records and Quintessence labels arrived, I was engaged in gathering information for this month's annual recordings preview. For me (and, I suspect, for many readers as well) such a year's preview provides a graphic reminder of how much classical recording activity there is, and of course the preview deals only with records issued for general sale in the U.S.

It's a useful reminder, for the classical record business, measured by the sales standards of the pop world of the Sixties and Seventies, sometimes seems like a hobby. It's also worth remembering that new releases represent only a tiny part of the classical story, and that even if we consider the entire current classical catalog we are talking about a mere sampling of the total worldwide output from the more than seventy-five years of serious recording. One of the nicest qualities of classical records is their durability. Good ones travel well and never become obsolete; indeed historical perspective often increases their interest.

The real problem is what to do with all those records. In quite different ways, these two new labels represent valuable and highly successful initiatives, building catalogs out of licensed material that either has never been issued domestically or has already been in and out of Schwann.

HNH Records is a logical outgrowth of what was formerly HNH Distributors. HNH's Harvey Neil Hunt has made a specialty of seeking out smaller European companies that have no U.S. distribution—England's Unicorn, CRD, Lyrita, and Vista; Sweden's Bis and Caprice; France's Harmonia Mundi and Decca. Their records, not surprisingly aimed at distinctly specialized audiences, have found a responsive following here, and that success has led to the creation of the new label, which will offer titles from some of those and from other sources. In recognition both of the quality of the source material and of the sophistication of its output, the HNH label is a delta pricing ($7.98-per-disc) line. The jackets, sturdier than those of most American releases, feature attractive and carefully chosen cover art, with liner notes of generous length (variable in quality, but uniformly serious in intention) and texts and translations for all vocal works. More importantly, the records themselves are of exceptional quality. In cases where I have been able to compare the new discs with previous issues, the HNH mastered disc has been at least equal—and arguably superior—to the European equivalent in clarity, presence, and dynamic range. And so far, at least, HNH seems to have found a way of getting high-quality domestic pressing; my copies of the Niccolini Sinfonia No. 20 in E minor, and the Tomaso Arriaga's Symphony in D, which, along with Toma's Sinfonia No. 9 and five other symphonies, is performed by the English Chamber Orchestra under Jesús López-Cobos (HNH 4001). The symphony was composed not long before the composer died in 1826, just shy of his twentieth birthday, but I find it so doggedly classical-conventional as to wonder whether we would bother with it if the composer hadn't died so young. The cause is not helped by López-Cobos' somewhat soggy performance and the rather stony engineering by Spain's Discos Ensayo.

Ensayo largely redeems itself with a pleasant disc of Vivaldi vocal works: Psalms 126 (Nisi Dominus) and two motets (Invidi bellerata and Largo ma V-high uma trese terres) sung by mezzo Teresa Berganza, with the ECO under Antoni Ros-Marbà (HNH 4012). And fans of Carlo Bergonzi will enjoy his Ensayo collection of arie onfiche accompanied by pianist Felix Lavilla (HNH 4006). The tenor is not, however, in very good voice, and his huff-and-swell phrasing is almost as inappropriate to the music as the piano accompaniments.

Heartily recommended to baroque aficionados, by contrast, is a cleverly pro-

HNH & Quintessence: Impressive Debuts

by Kenneth Furie

Dorati's Mahler is of the no-nonsense school, which I count to the good, but this Fifth happens to be grander and more powerful than I expected on the basis of the quite strongly inspired leaner Sixth he did a couple of years back with the National Symphony. The second movement is somewhat undercharacterized, but on the whole this seems to me as good a Fifth as there is, and the recording (produced by James Mallinson) is outstanding. I am less taken by the folksy melancholia of the Peterson songs, whose primary interest for me is Dorati's vivid orchestration. Saëdén is in considerably better form here than he was as the Speaker in Ingmar Bergman's Magic Flute film; these performances presumably date back some years.

Even more impressive from a sonic standpoint are two 1975 Lyrita orchestral recordings: E. J. Moeran's G Minor Symphony (1938) played by the New Philharmonia under Sir Adrian Boult (HNH 4014) and Bax's Concerto in E (1938) played by the London Philharmonic under Raymond Leppard (HNH 4010). The engineering style is somewhat more distant than I might ideally desire, but of its kind it could hardly be better, especially in the Moeran: Orchestral textures are beautifully registered, with a wealth of detail all very naturally in place—a terrific test for cartridges.

I suspect that the recorded sound and Sir Adrian's wonderfully sympathetic reading considerable enhance the virtues of Moeran's only symphony. To his credit, the composer had the sense to build the symphony out of tiny ideas, and there is no denying the attractiveness of the persistent bursts of wind color. The Bax symphony, his last, is also skilfully made, and also, to my hearing, decidedly modest in inspiration—I would just as soon take my Sibelius at first hand. Perhaps it's unfair, but while listening to these works I am unable to put out of mind the fact that by the time of their appearance Vaughan Williams' first four symphonies had been written and played.

Such works unquestionably have a place in the catalog, and so too does Juan Cras-
the bulk consists of reissues, and the bulk of those, at least in the first release, come from RCA. Quintessence has been two years aborning, since the legendary R. Peter Muvene joined Pickwick International following his years with Columbia and RCA. Muvene thinks he can couple his demonstrable marketing drive with high quality and budget price ($3.98 per disc) to widen the classical market, and both Quintessence series—‘Critic’s Choice’ and ‘Classics for joy’—are designed with special attention to groups presently on the fringe of the classical market. ‘Critic’s Choice’ discs contain performances of fairly standard repertory by artists of high reputation, packaged with critical endorsements based on their previous incarnations. Muvene sees this as a way of guiding the newer classical buyer through the bewildering array of SCHWANN listings, but more to the point for HF readers is the fact that a large number of interesting performances hereby enter (or re-enter) the catalog.

Heading the list are four RD discs by the late Jascha Horenstein, all reflecting the proper stylistic propinquity of his early musical apprenticeship. His 1962 Dvorak New World Symphony with the Royal Philharmonic (PMC 7011) is like no other performance I have heard: almost terrifyingly stark, unrelenting, even tragic. Niceties of tone color are subordinated to rigorous rhythm, angular phrasing, and sonic power; I’m not sure whether I actually like it, but it’s an awesome, emotionally draining experience. Less controversial, but of comparable strength, are the 1962 Brahms First with the London Symphony (PMC 7028), the 1968 Tchaikovsky Fifth with the New Philharmonia (PMC 7002) and the Franck Symphonic Variations (1968), conducted by, respectively, Sir John Barbirolli’s four Sibelius recordings (1968) and the Franck Symphonic Variations (1968), conducted by Sir John Barbirolli. The third of Sir John Barbirolli’s four Sibelius recordings (1968) and the Franck Symphonic Variations (1968), conducted by Sir John Barbirolli.

Among the ‘Critic’s Choice’ reissues, I am most taken by the 1954–55 Stokovski recording of the substantially complete middle acts of Tchaikovsky’s Swan Lake with members of the NBC Symphony (PMC 7007), as passionate as one might expect and sounding surprisingly good in this rechanneling. (There is also a rechanneled Stokovski disc of Liszt Hungarian Rhapsodies and Enescu Romanian Rhapsodies, PMC 7023, for those who like that sort of thing.) None of the other rechannelings sounds better than listenable to me (all mono records are so ‘electronically enhanced’), but Pierre Monteux’s excellent 1954 Debussy La Mer with the Boston Symphony is welcome all the same (PMC 7027), especially as now coupled, with the 1955 Nocturnes (in true stereo). Also welcome back are Sir Thomas Beecham’s 1956 EMI ‘Favourite Overtures’ with the RPO (Rossini’s ‘Cantabile di matrimonio’ and Gavazza Adagio, Mendelssohn’s Midsummer Night’s Dream and Fear Melusina, and Berlioz’s ‘Coromar:’ PMC 7004) and Morton Gould’s 1962 RCA Sibelius miscellany (Swan of Tuonela, Lemminkinen’s Return, Finlandia, Valse triste, and Pohjola’s Daughter: PMC 7022).

The ‘Classics for joy’ series is frankly directed more toward the light-classical market, as reflected in such RCA-derived items as ‘Innocent Classics in a Light Mood’ (PMC 7018), ‘Clair de Lune: Classics in a Romantic Mood’ (PMC 7025), ‘Hallelujah! The World’s Greatest Choruses’ (PMC 7019), and collections of Grieg (PMC 7019) and Bizet (PMC 7024). But even in this series there are attractions for more seasoned collectors, foremost among them a Telefunken collection of works by Julius Fucik (including, of course, the Entry of the Gladiators—you may not know it by name, but you’ll know it) in suitably lively performances by Vlach Neumann and the Czech Philharmonic (PMC 7038).

Two rechanneled Fiedler/Boston Pops/RCA discs, though faded in sound, remain quite live in spirit: a collection of overtures (Rossini’s William Tell, Hérold’s Zampa, Thomas’s Mignon, Offenbach’s Orphée aux enfers, Suppe’s Light Cavalry, and Nicolai’s Merry Wives; PMC 7013) and a Johann Strauss assortment (PMC 7015). That expert conductor Fiedler/Fistouleri gives characteristically lyrical performances of Gaîté Parisienne and Les Sylphides with the RPO (PMC 7029), while those willing to settle for suites from Tchaikovsky’s Nutcracker and Swan Lake ballets could do worse than the Boult performances with the New Symphony of London (PMC 7010). Quintessence’s packaging is serviceable enough, and the pressings are quite reasonable for a budget label. That the disc mastering has been done with some care is made clear by fine (if overly brightened) sound of the Reader’s Digest recordings, made by the team of producer Charles Gerhardt and engineer Kenneth Wilkinson. Clearly future Quintessence releases bear closer watching, and there will be a lot of them. Unlike those record people who concentrate on new releases at the expense of backlist, Muvene plans to market his whole catalog aggressively, and in order to build up a catalog he envisions releasing 20–25 records (in four times a year for the first two years or so.)
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Lucia Popp (Columbia).

Ochs is a problem. Does coarseness of spirit have to take the form of conspicuously grotesque loutherness? (How often does it in real life?) To my mind that standard approach hopelessly trivializes the character, substituting comic-strip grotesquerie for the relatively dangerous inner qualities that make him such a tragic mismatch for Sophie. Someday I would love to hear an entire Ochs with the vocal quality and interpretive control of Alexander Kipnis recording of the letter scene (on Sera phim 60124). Fortunately we have one recorded Ochs pretty near that level: Ludwig Weber (Richmond). Though in his mid-fifties at the time, Weber made remarkably few concessions to advanced age, and his respect for Strauss's writing gives the character a basic dignity I consider essential to the opera's dramatic sense. The only other recording that even casts Ochs as a singing role is the Columbia, where Walter Berry's singing happily reflects very minimally the nasty grubbiness of his stage portrayal.

I had hoped that Jules Bastin, a singer who has demonstrated some sensitivity, might raise Ochs above stereotype. He doesn't, and I frankly don't know what he's doing. It's not the gross boorishness of Kurt Bohme (DG) or the murky, make-do inelegance of Otto Edelmann (Angel) or the strained Viennese archness of Manfred Jungwirth (London), all carefully and consistently executed performances and all, to my mind, dramatic travesties. (In fairness, Jungwirth does seem to be realizing the music as faithfully as he can, but the voice isn't much to start with.) What it is an anonymous and disjointed exercise. Bastin's isn't a great voice, but it is capable of more than this—Ochs turned into a comi parring.

An even older Rosenkavalier tradition is perpetuated here in the casting of Faninal. Surely the requirements of the role are clear enough: a secure high baritone with some real handling ease. Yet only Angel's Eberhard Wachter and DG's Fischer-Dieskau fit that description. (The latter doesn't do all that well, but that's due to his familiar prissiness, not to vocal unsuitability.) Philipp's Derek Hammond Stroud is a worthy singer, but it should have occurred to somebody that Alberich, his most famous role, is a poor recommendation for Faninal. (At that, he's better than his Richmond, London, and Columbia competitors.) No more successful, but for less mysterious reasons, is the casting of the Italian Singer. for Jose Carreras, merely grins a distinguished line of tenors (on records Nicolai Gedda, Luciano Pavarotti, Placido Domingo) who don't seem to have realized that Strauss's musical joke was primarily for the singer, especially if he expects to walk in and toss the aria off. Carreras, normally a singer of impeccable taste, is reduced to bellowing the whole thing, no doubt praying that each stanza will end before his respiratory system collapses.

The supporting cast does its job, and the recording is unobtrusively first-rate. The accompanying materials are lavish but not very helpful: the German text is in the main booklet, but the English—a singing translation—is in a separate one (which also contains a French singing translation). If you've
Frederica von Stade
An Octavian to rival Jurinac's ever wondered how Rosenkavalier goes in the French. Over-all, the recording strikes me as an interesting supplement to the Karajan, Solti, or Bernstein. If I could have only one version, it would certainly be the Kleiber, then I would be inclined to add the fascinating and quite different Bernstein, which also supplies the Kleiber's one serious lack, a vocally assured Marschallin.

K.F.

WAGNER: Tristan und Isolde (excepts)

Isolde
Brangane
Tristan
Wagner: WP

Berlin Municipal Opera Orchestra, Arthur Rother, cond: TELEFUNKEN 26 48020, $15.96 (two discs, mono, manual sequence) [from Telefunken originals, recorded c. 1952–53]


One of several Wagnerian ladies prominent during the interregnum between Kirsten Flagstad and Birgit Nilsson, Martha Modl (b. 1915 according to Kutsch/Riemens) began late as a singer, and began as a mezzo. Her debut role in 1943 was as Brangane in Wagner's Tristan, and she first came to international attention as the mezzo of Kleiner, with whom she sang Brangane in Klynter's 1953 Rome Ring and 1954 Walküre on Seraphim, as well as Fiorelli (also with Furtwängler, on Seraphim). The voice reached up to high C. The singing was rich and creamy, the registers still quite coherent—and the singing now began to be effortful in the other sense, with a medium of scooping, attacking notes from below, and an incipient tremolo around the break. That heavy breath pressure hardly ever let up, and the technique required not only frequent breaths, but big ones. A handsome woman as well as an intelligent one, she found much favor with Wieland Wagner, and was a Bayreuth regular through the Fifties, but the hard use eventually took its toll and she turned to singing character roles.

Modl never recorded a complete Tristan, and the current reissue from Telefunken constitutes the complete commercial and now available documentation of her work in the part—an oddily assorted package, I'm afraid. The Love Duett comes first. On two sides and starting right after Isolde's extinction of the torch, but with the more-or-less standard "Big Cut" (from Tristan's "Dem Tag der Tag" to Isolde's "Doch es ruchte sich der verwehte Tag"). The slow parts of this are the best. Modl making the consonants cleave into her husky tone to good effect. Wolfgang Windgassen fresh, clean, and generally accurate. Johanna Blatter acceptably in tune and conductor Arthur Hört her following Wagner's instructions rather carefully. Partly, I particularly like the way the way she keeps the climax of the "So stiirben wir" passage from getting out of control. But elsewhere the tempos are not really fast enough—or, at least, propulsive enough to compensate for the slowness that one presumes the singers have imposed (from Kohn's Prelude, one would not expect him to harbor excessively Furtwanglerian urges). And while these slower tempos do facilitate some matters (intonation, for example), they complicate Modl's breathing problems: at the very end, she is reduced to three-note ascending glissando gasps rather than proper phrases. The recorded sound doesn't help much either, with the singers up close, the orchestra's dynamic range compressed into the background, and the whole business heavily monitored (you can hear the engineers sneaking the level down to make headway for the final climax). Whatever dynamic contrast this performance may have had to begin with was ruthlessly ironed out before it got to use. So much for a revival.

Next comes Kohn's shapely and unremarkable Prelude, recorded with rather a lack of paper edge to the strings, and a Liebestod that must be chopped up for breath more frequently than any other in history—until the very end. Modl takes the final phrase (" Hochste Lust") in a single breath, by dint of letting up on the pressure and floating the final note. It's a good effect, and one wishes she had learned to integrate it into her singing on some sort of regular basis. The Narrative and Curse finds her in less good voice than the other excerpts: occasionally flat, with some pronounced frogginess in the tone. With everything so effortful, even the simplest phrases, the shape of the scene simply vanishes; she's singing all-out all of the time with the air of a soldier punching home the final curse. And Blatter here sounds like a parody of Modl in a lower register. It makes the inclusion of Brangane's song a decidedly mixed blessing, except that it does lead to part of the scene with the potions, where Modl gets off a few phrases with really telling dramatic intelligence.

All in all, this makes for a pretty expensive souvenir of an Isolde who on other occasions (and perhaps in other parts of the role—I would like to hear her sing 'Mir erkoren' Mir verloren?') may have been compelling but isn't often so on these discs. I harbor a thought that the interesting material here could have been squeezed onto a single disc; the Prelude aside, there's only a bit over an hour here, and given the limited dynamic range that surely could have been managed.

Like Neville Marriner's Academy of St. Martin-in-the-Fields, but unlike Christopher Hogwood's Academy of Ancient Music, Michael Dobson's Thames Chamber Orchestra uses modern rather than period or replica instruments, except of course for Celia Harper's Flemish-styled Aflam Burnett harpsichord. Dobson himself, long principal oboe with the London Philharmonic, and Michael Dobson, proves to be a skillful if extremely self-effacing conductor who is, here at least, an outstandingly imaginative program-maker. Four of his present selections are, if not record firsts, most likely new to American disc catalogs.

BAROQUE CONCERTO IN ENGLAND. Thames Chamber Orchestra, Michael Dobson, cond [Simon Lawman, prod.] CDR 1031, $7.98 (distributed by HNH Records)

 unconsciousness in liner notes will perhaps treasure the blurt's assertion about Modl that "it was not possible to discern that she was thereby taxing herself to the limits of endurance" on these discs, alas, it's all too evident. The blurt is given in English and German, the texts only in English, and was a Bayreuth regular through the Fifties, but unlike Christo-

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Howl? These are symptoms of Clem Cm at Higher Volu
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**High Fidelity Magazine**

Kempff, who comes from a family of organ-
ists, actually began to play that instrument
before his legs were long enough to reach
its pedals. This collection of his own ar-
rangements reflects that interesting cross-
pollination of baroque Lutheran organ tra-
dition and secular Romantic pianism. One
repeatedly hears Kempff's fondness for ripe
bass tones and sensual harmonic richness
allied to a penchant for penetrating clarity
and austere starkness. Whereas Dame
Myra Hess's more famous version of " Jesu
bleibet meine Freude" is purely pianistic in
its quiet, flowing simplicity, Kempff's ver-
sion—more angular and sometimes more
dramatic—makes one conscious of reedy
plinths and ringing ambience. Particularly
effective, in terms of both arrangement and
performance, is the "Wir danken Dir, Gott,
wir danken Dir," which turns out to be
none other than an enriched version of the
famed Preludio of the E major Violin Para-
tita. Kempff creates a spell by the use of col-
ors and timbres here, and though Roman-
ticism runs rampant, it never runs amok (as
in Rachmaninoff's far less tasteful bowd-
erization).

Kempff's octogenarian fingers can still
handle intricate patterns and part-writing with
brilliant precision, and what a won-
derful ear he has for color and texture! He

dy roared in protest and made sure that
his own No. 4, also in F, was properly in-
cuded in all later editions. But the music it-
self is not entirely unworthy of its Han-
delian attribution even if—now that we
know better—it does reveal some signifi-
cant stylistic differences and only remotely
approaches the Old Master's grandeur and
inventiveness. It has its delightful mo-
ments, though, not least in its stately Si-
cilianos, all of which are enhanced by ex-
ceptionally taut solo parts and the vividly
close recording (which, however, is high
enough in modulation level to benefit by
lowering the playback level).

The Boyce concertos (two of four long
forgotten and unpublished) aren't quite up
to the best of his "symphonies," but they
add considerably to our appreciation of
Boyce's creative range. The E minor work
is fascinating for its frank use of Messiah mo-
tives, given somewhat more homespun
therapy than Handel's own but marked by
a distinctive if quite differentperson-
ality. However, the most arresting and un-
expectedly delectable works are the flute
and oboe concertos (respectively. Nos. 8
and 12 of a set of twelve published by
Walsh in 1722) by the flutist/composer Rob-
ert Woodcock, who doesn't even rate cita-
tion in most reference books and whose
brief entry in Grove's can supply only a "?"for both birth and death dates. Whenever
he was born and died, Woodcock was once
not only very much alive, but gifted with
both a sense of puckish humor and poi-
gnant songfulness. And he is given belated
 justice by Dobson and the superb soloists
obist Neil Black and flutist William Benn-
nett.

R.D.D.

**Wilhelm Kempff:** Bach, Handel, and Gluck
Arrangements. Wilhelm Kempff, piano. [A-
dolf Werner, prod.] Deutsche Grammophon
2530 647, $7.98.

Kempff, who comes from a family of organ-
ists, actually began to play that instrument
before his legs were long enough to reach
its pedals. This collection of his own ar-
rangements reflects that interesting cross-
pollination of baroque Lutheran organ tra-
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in Rachmaninoff's far less tasteful bowd-
erization).

Kempff's octogenarian fingers can still
handle intricate patterns and part-writing with
brilliant precision, and what a won-
derful ear he has for color and texture! He
creates a velvety legato through a combination of digital flexibility and resourceful pedaling, and he is not loath to show his bare fists when an assertive phrase dictates. Indeed, some listeners may be slightly put off by the prominence he gives to the inner chorale voice (or the aforementioned “Jesu bleibet meine Freude,” but I love the mixture of gentility and stubborn toughness.

DG’s sound again recalls the deep, solid pickup given Kempff’s mono Beethoven sonatas cycle, and the surfaces are flawless.

It seems a bit odd to begin a collection of American piano music written between 1900 and 1945 with such way-out pieces as Ives’s Anti-Abolitionist Riots and Some Southpaw Pitching, which, though composed in 1908 and before, are more unorthodox in sound than any of the other pieces in the album. But they do emphasize the fact that Ives walked alone, and that in a chronological sense his career was basically finished by the end of World War I. Following these wild little works with the far less radical “Alcotts” movement from the Concord Sonata makes for a clever transition back to the miniatures of Edward MacDowell, the impressionistic essays of Charles Tomlinson Griffes, and the accomplished academism of John Alden Carpenter, the composers chosen (according to Leonard Hulse’s program booklet) to represent American music written before World War I.

The 1900-45 period, says Hiller, breaks down into three parts: the years before the First World War, the 1920s, and the years between the Depression and World War II. (This strikes me as an exceedingly strange—and historically faulty—breakdown.) The 1920s are represented here by Henry Cowell, George Antheil, George Gershwin, Roy Harris, and Aaron Copland (sound choices, except for the 1922 Airplane Sonata...); while 1930-45 is typified by Carl Ruggles, Roger Sessions, Virgil Thomson, William Schuman, Walter Piston, Wallingford Riegger, and Samuel Barber.

Among the rarities I found especially interesting were Carpenter’s 1913 E flat minor Impromptu, Antheil’s 1922 Airplane Sonata (it is about time, I think, for an Antheil reissue), Harris’ 1928 Op. 1 Sonata, Thomson’s 1930 Sonata No. 3 and the two samples from his 1943 Ten Etudes, and the six movements from Riegger’s 1944 New and Old. Roger Shields, currently artist-in-residence for the North Carolina State Arts Council, plays these—and the more familiar pieces—with unusual sensitivity and considerable virtuosic bravura.

Both he and Hiller have great difficulty, however, with the MacDowell Woodland Sketches. First of all, Hiller labors under the misapprehension that MacDowell got his idea for poetic titles from Schumann, something that is contradicted by history; if he got the idea from anyone, it was from Cigée. Second, the set is improperly called Op. 51 throughout; it is Op. 51. Third, nowhere are the numbers or names of the chosen five Sketches (out of the ten in the set) specified. For those who are curious, they are (in order of appearance): “A Deserted Farm” (No. 8), “From Uncle Remus” (No. 7), “At an Old Try-Again-Place” (No. 3), “By a Meadow-Brook” (No. 9), and “Told at Sunset” (No. 10).

And the abridgment of the work leads to a strange editorial decision in the finale. In his notes Hiller makes much of the fact that “Told at Sunset” quotes “rather extensively” from earlier pieces in the set. The last seven measures are a (by no means verbatim) quotation from No. 5, “From an Indian Lodge,” which is omitted in this recording—and so too are those final measures of “Told at Sunset”! Hiller blythe explains that they were “cut in this performance, because it [the quotation] would have introduced an extraneous element in this reduced version of the Woodland Sketches.”

Nor is the MacDowell the only work given here in abbreviated form. Shields offers only two of Griffes’s four Roman Sketches, two of Thomson’s Ten Etudes, six of the twelve movements in Riegger’s New and Old, and the finale from Barber’s piano sonata. Rarely, however, has so much American music of the first half of our century been set forth with such clarity and sympathy, and the engineering is excellent.

I.L.


Rzewski: Variations on “No Place to Go but Around.” Braxton: P-JOS-**AK-O-(MX). Eshler: Sonata No. 3.

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CIRCLE 10 ON READER-SERVICE CARD

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September 1977
Big titles, empty music. Nowhere in his liner notes does Frederic Rzewski explain either what "No Place to Go but Around" is, even though his extended composition is supposed to be variations on it (a pre-existent theme? a 1969s carthorse?), or the complete meaning of Braxton's enigmatic title. At least Rzewski's own composition, a big, chordal crescendo-des crescendo with a smooth rhythmical flow and a pseudo-transcendental technique, is pleasant enough to listen to. But his flashy pianism and milieupretensions (Bundriero Rossa is quoted extensively toward the middle) do not save it from sounding like amateurish improvisation not really worth immortalizing on disc.

Anthony Braxton's P-105*K4-D-MIX is typical of any number of performer-orientated pieces. Its various atonal puzzles are no doubt fun for the soloist to put together. But to the listener, the music sounds like yet another in a long string of pointless, pointillistic maneuvers with almost no originality, save the use of a few interesting chords and clusters here and there.

Unlike Braxton and Rzewski, both of whom were born in this country, the late Hans Eisler (1898-1962) was born in Germany, even though he spent eleven years in the U.S. Probably best known for his film music and a book he wrote on the subject, Eisler was also a devout socialist who often became involved in the application of Marxist theory to music. (He did not fail to get blacklisted in the McCarthy years and was thereafter forced to leave this country in 1948, just as he had been obliged to seek exile from Nazi Germany in the 1930s.) There is nothing Marxist about his Third Piano Sonata (1948), however. The style strongly recalls that of the Berg piano sonata, minus the latter's expressiveness and plus a good deal more vigor. More advanced in style than Rzewski's variations, more listenable than the Braxton doodle, the Eisler sonata bears the mark of sincere and accomplished musicianship, even if it is not apt to find a permanent niche in the repertoire. And, by golly, its title gives a clue to what the music is supposed to do.

As a pianist, Rzewski gives energetic, committed performances that show a big, impressive technique. (It is hard to judge his interpretative abilities from the music on this disc.) But this is the second Finnadar I have heard on which the piano could have stood some tuning. The recorded performance which I regret some of the omissions, in particular the sinuously sinister "Silvermaid's Dance," which strangely hints (as does the "Blue Rose" sequence that is included) at Rozsa's score, his tenth effort for the Thief of Bagdad, became involved in the application of Marxist theory to music. (He did not fail to get blacklisted in the McCarthy years and was thereafter forced to leave this country in 1948, just as he had been obliged to seek exile from Nazi Germany in the 1930s.) There is nothing Marxist about his Third Piano Sonata (1948), however. The style strongly recalls that of the Berg piano sonata, minus the latter's expressiveness and plus a good deal more vigor. More advanced in style than Rzewski's variations, more listenable than the Braxton doodle, the Eisler sonata bears the mark of sincere and accomplished musicianship, even if it is not apt to find a permanent niche in the repertoire. And, by golly, its title gives a clue to what the music is supposed to do.

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Many American connoisseur collectors may not know about the mushrooming numbers of classical music cassettes selling at budget and even bargain prices. For generally these either appear overseas and as a rule are not brought in by importers like Peters International, or they are produced here primarily for sale via mail-order or special dealers—and hence denied SCHWANN listings. I'm indebted to the knowledgeable conductor/connoisseur/critic William Radford-Bennett for calling my attention to the possibility of privately importing cassettes in such British budget lines as EMI's Musicway, CBS/Columbia, and Greensleeves series, DG's Privilege and Helidor, Philips' Sonic and Fontana, English Decca's Ace of Diamonds, etc. Their prices range from around £1.75 to £2.50, which at current exchange rates convert to quite reasonable dollar costs. But just as I was considering some discussion of the generally well-processed examples Radford-Bennett lent me, it has become more urgent to hail both the debut of a novel American series and news of expanded domestic activity on the part of several other specialist labels.

The newcomer is the Sine Qua Non label, some six years old in the disc world, now expanding into cassettes with more than fifty titles already and more coming soon. Marketing is mainly via bookstores plus some, but not all, record dealers: the repertory is so far confined almost exclusively to reissues of older recordings and some relatively new ones not previously released in the U.S. I've certainly never encountered a better bargain than the double-play Dolby cassette (SQN 147) of the 1964 Ristenpart/Saar Chamber Orchestra versions of the four Bach suites for $3.98. (That's the normal selling price; there is a 'suggested retail price' of $5.98.) And among the singles (suggested retail price $4.98, but sticker-priced $2.98 each), there's another rejuvenated old-timer in the Baroque tavern, the baroque trumpet concertos (SQN 7753) and a sonically up-to-date (1975) Stravinsky program (L'Histoire du soldat, Dumbarton Oaks Concerto, wind octet) crisply played by the Nash Ensemble under Elgar Howarth (SQN 2011).

However, another recent issue from the EMI Classics for Pleasure series, Rahmannov's Second Symphony by the promising young conductor of the Hallé Orchestra, James Loughran, is less satisfactorily processed in SQN 2008 than in its British Musicway edition. And while all SQN cassette editions are Dolby, there are no notes, and some labels (like those of the Bach suites) provide no movement details. As always, the bargain-buyer must take care, but the best choices offer fine music and fair to very good sound at what must be rock-bottom prices. (For catalog and dealer information, write Sine Qua Non Productions, 1 West St., Fall River, Mass. 02720.)

CCC changes. Since my earlier reports on tape-pioneer Julius A. Kohn's budget mail-order productions, there have been changes in name, prices, and some policies, but none at all in the highest of Dolby processing standards. What's now the Classical Cassette Company (no longer Club) has nineteen new releases, including ten normal-length programs drawn from earlier extra-long ones; and prices range from $3.95 to $7.95. As before, the recordings are mostly reissues, but a featured one (CCC BP 57, $6.95) hasn't yet appeared in any disc edition: Delius' rhapsodic, magically haunting cello sonata and the three fascinating violin sonatas, persuasively played by the respective teams of Alexander Kouguell and David Hancock and Derry Dean and Eleanor Hancock, and superbly recorded and processed.

Impressive in different ways are the first taping of Mussorgsky's Khovanshchina in the powerful if rough Margaritov/Sofia National Opera version (CCC CP 48/49, $15.90; libretto $2.00 additional) and a set of thirteen "Popular Symphonic Marches" (CCC A 58, $3.95) by Winograd and the Virtuoso Symphony of London—a 1960 Audio Fidelity spectacular still remarkable for its vivid sonic presence. (For the complete 1977 catalog, write the Classical Cassette Company, 118 Route 17, Upper Saddle River, N.J. 07558.)

... With more to come. Besides other SQN and CCC cassettes (and possibly some of the latest from Everest/Olympic), I hope to report soon on the expanded production of Musical Heritage Society cassettes ($4.95 each to MHS members) and the new series, distributed by Vox itself, of Vox/Candid/Turnabout programs ($4.98 each). The complete 1977 MHS catalog with cassette equivalents is available for $1.00 from the Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755. And for a leaflet listing its first fifty cassette releases, write Vox Productions, 211 E. 43rd St., New York, N.Y. 10017.

Priceless instrumental voices of the past. For what can be saved through the foregoing economy-class tapes, even the most budget-conscious connoisseur may be able to afford the $23.98 cost of the late David Munrow's crowning masterpiece, Angel's 4X3S 3810 combination of two Dolby XDR cassettes with a sumptuously illustrated and informative 100-page book. Together they bring back to exhilaratingly pungent life the instruments, individually and in ensemble, of the Middle Ages and the Renaissance. This is without question the finest-ever achievement of its kind, not only for incredibly expert performances on the period and replica instruments themselves, but for the embodiment of their sounded timbres in appropriate period pieces delectable for their own musical—as well as representational—sake.

Busier than ever majors. Along with the extraordinary Munrow work, there are a number of other current Angel releases, five Connoisseur Society/Advent deluxe CR/70 newcomers, and big batches of new London, Philipses, and RCAs clamoring for attention—all of them nowadays in Dolby processings. Of the few I've been able to hear so far (more later), I've particularly relished the following:

• Connoisseur Society/Advent E 1052 and 1053 ($7.95 each), which demonstrate how a master virtuoso, the Argentinean Bruno Leonarda Gelber, can freshly illuminate even such often and well recorded standards as the two Brahms piano concertos. They are played here with Decker and the Munich Philharmonic (No. 1) and with Kempe and the Royal Philharmonic (No. 2) in exceptional, noble recorded performances and well-nigh ideal cassette processings.

• London CS5 6881 and 7032 ($7.95 each), respectively Alicia de Larrocha's near-definitive survey of the lively Meyerbeer-Lamber baleet Les Patineurs, augmented by Messen's Le Cid ballet suite and Ariane excerpts, robustly recorded by Bonynge and the National Philharmonic.

• Philips 7300 517/8 ($7.95 each), with Colin Davis and the Boston Symphony continuing their Sibelius symphony series begun with Nos. 5 and 7 more than a year ago. Popular favorites No. 1 (with Finlandia) and No. 2 here are given arrestingly fresh readings, magnificent orchestral playing, and warmly lucid recording. Outstanding triumphs all around.

SEPTEMBER 1977

by R. D. Darrell
Brushless. Slotless. And Coreless. For flawless direct-drive operation.

Hitachi's Unitorque Motor.

Hitachi's Unitorque motor turntable is unlike any other turntable in the world. Brushless. Slotless. And coreless. It uses two star-shaped flat coils for balancing and distributing torque evenly.

The unitorque motor is a non-commutator DC servo motor with an 8-pole rotary magnet and flat, square coil configuration. The construction is completely free from brushes, slots and cores, and free from motor "cogging" or pulsations. In fact the performance is so perfect...tests show wow and flutter at 0.025%, an almost 40% improvement over conventional motors. The torque generated is even, balanced, almost flawless.

And when you generate flawless torque, you not only get flawless speed. You get what you really want in a turntable.

Flawless music.

HITACHI
When a company cares, it shows.

Hitachi Sales Corporation of America, 401 West Artesia Boulevard, Compton, California 90220
Quick, throw in another patch!” shouts the engineer. Like a kid with a new toy (and looking like a kid with his new hairstyle), Herbie Hancock is bent over an ARP 2600. He strikes a key and yells back. “Take that, you guys—we’ll get ’em this time!”

The ARP signal takes off across the sea of multicolored level indicators on the San Francisco Automatt’s 32-track board.

“We can’t lock into the right beam anymore,” engineer Fred Catero cautions, throwing switches with both hands.

“Fire phaser 1,” his assistant advises.

Then the phone rings, and it’s producer David Rubinson, the boss. He’s been listening in on remote

The author, a free-lance jazz writer and contributing editor to Down Beat, won the 1976 Ralph J. Gleason Memorial Award for jazz criticism.
speakers in his office upstairs. The road manager is in
the control room and answers the phone: “Hello, Mis-

sion Control. . . . No, this is the soundtrack for Star
Wars.” The overdub ends with a round of laughter.

After the playback, Herbie is not so lighthearted.
“That's hazerei,” he decides. “Is that how you say it?”
Catero, Herbie’s engineer since the “Headhunters” al-
bum, assures him that it is. Hazerei is Yiddish for junk.

Herbie is not upset, however, because this is all

“I think music is better
than it's ever been, not worse.”

part of his new process of composition. Keyboards are
no longer his only instrument, though they are legion
(the Oberheim and Yamaha polyphonic synthesizers,
the ARP 2600, Odyssey, and Pro Soloist, ARP’s String
Ensemble. Hohner’s Clavinet. the Fender Rhodes
electric and Yamaha electric grand pianos. not to
overlook the Baldwin acoustic in the studio for this
session). The newest instrument is the recording stu-
dio itself. Herbie improvises his music, which he often
refers to as “the finished product.” on the Automatt’s
new computerized overdubbing system.

“It all began when we were doing ‘Crossings’ and
‘Sextant.’ ” he explains. (These were the Warner al-
bums by Herbie’s avant-garde octet of the late Sixties,
which he eventually disbanded as insolvent.) “Patrick
Gleeson was playing synthesizers for us, but we
weren’t doing much with overdubs. Then, during one
session, our equipment manager turned on a random
resonator which picked up and filtered all the noises in
the studio. We really liked parts of the tape and made
a loop by stretching it across the desks, file cabinets—
everywhere! We spliced together what we wanted and
used it as a rhythm track for Rain Dance on ‘Sextant.’

“Little by little, things that happened in the stu-
dio became more prominent in the shaping of the mu-

sic. Now I go in with a basic drum, bass, and piano
chart sketch. When it comes to the other instruments,
especially synthesizers, I never know what I want until
I hear it. The recording process itself becomes part of
the composition of the music.

“I even work that way at home with my eight-
track recorder and all the keyboards around me. I’ll
start off with an idea, do an overdub, and then see how
things are coming out. I’ll have to admit it makes me
kind of lazy—I don’t put too much down on paper an-
more. Paper is slow. By the time I’d write some things
down, the idea would be lost.”

Herbie’s “finished product” has come under fire
in recent years, ever since he deserted pure jazz for an
allegedly longstanding desire to play like James
Brown and Sly Stone. His music was soon known as
funk, or as the aficionados tend to pronounce it,
“fonck.” Now there is a lingering debate over whether
Hancock is a populist hero who communicates with
the masses or simply a sellout to commercial taste. His
detractors claim he was making more lasting music in
the Sixties with his sparkling acoustic solos with Miles
Davis’ band, and in the lush harmonics of his
“Maiden Voyage” and “Speak Like a Child” albums
on Blue Note, the adventurous Warner LPs, or his in-
dividual compositions such as Watermelon Man or the
expansive scores for Blow Up and Fat Albert Rotunda.

“There might have been more happening musi-
cally in a technical sense,” is Hancock’s counter to his
critics, “but that’s not the criterion of good music. My
definition of good music is what feels good. I try not to
listen to music from a technical standpoint. I hear mu-

sic the way a normal person hears it. Look, it’s ob-
vious—most people don’t respond to the Warners and

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Ken Terada
Blue Note music. If they liked it, they'd buy it. Isn't that how it works?"

Perhaps. But that argument may ignore the degree of promotion he's received from Columbia, his label since the 1973 release of "Headhunters," which turned gold. And what if pop audiences have been sold the simpler and more easily repeatable style? In any case, one thing about Hancock's argument is certain: This straightforward, congenial, and articulate musician believes it steadfastly.

"I think music is better than it's ever been, not worse," he adds. "There's a lot more variety, more intelligence in the arrangements, more creativity in the structure. I'm just not very critical of music these days because, for the most part, I like what I hear. I'm not tired of funk either."

Most significantly, he is in the midst of another metamorphosis. The album that he was working on at the Automatt (due out in late fall) may please even his erstwhile fans. Aside from channeling more creative thought into the recording process, his music seems to have developed an orderly complexity and dependability that give it a sense of constant motion. When I described the playbacks as "not funky, but rhythmically baroque," he laughed: "I never thought of it that way, but I'd have to agree with you. I think it's the way the different instruments interplay rhythmically."

The arranging also seems to have greater clarity and better definition of the musical voices, a virtue that Herbie modestly attributes to the Automatt's technical capabilities. "The sound isn't hyped," he says. "But it's not dull either. I have to be very careful not to get gimmicky because electronics do lend themselves to it. The only way I know to avoid it is to use your own musical taste. It's not the nature of synthesizers to be gimmicky, so it isn't fair to blame the machines. The machines just do what you tell them to."

As films are made in the cutting room, Hancock's music often takes shape in the editing session after all the playing is done. But there are pitfalls, which he's learned to avoid. "When you cut, the tendency is to save all the hot parts. But that doesn't work. If you put all the hot parts together, you lose the contrast, you don't get the tension and release, and it decreases the heat of the hottest parts."

For a talented composer, there are unavoidable consequences of cutting. One of them for Herbie is that his pieces with improvisation usually end up pared down to... well, AM listening size. "I can write longer compositions for an album, but nobody's ever going to hear them. They would be too long for airplay. People's span of attention stretches three to five minutes. After that they'll change the station."

"It used to be like cutting off a piece of my body. Now I say, go ahead! Cut out my solo. I don't care. I'm not married to it as much as I used to be, and I think that's good. You can become self-indulgent if you're not careful. To think every moment in your music is something people want to hear! You might want to hear it, but that doesn't mean the guy sitting next to you wants to hear all that crap. You can become too personal about your own music, and I don't want to be that way."

The fact that Hancock refers to his own music as hazes and crap, even jokingly, is provocative. Certainly he has no reason to be so self-deprecating. But there is an effort to become "egoless."" deriving from his commitment to Nisherin Shoshu Buddhism. He claims that it was while chanting the sect's mantra, "nam myoho renge kyo" (literally translated as devotion, mystic law, cause and effect, vibration), that he was liberated from the "intellectual snobbery" of jazz.

Buddhism is still prominent in his life, and he believes that through chanting he has become more perceptive about himself. "My wife [Gigi] isn't a Buddhist yet. She tells everyone she gets the benefit of my practicing."

Interestingly, Herbie speaks only of practicing Buddhism, not music. "I've been spending more time on myself as a human being, rather than as a musician. I'm trying to be a better husband and father [he has one daughter, Jessica, age seven]. I figure if I succeed in that, it will be reflected in my music anyway."

Back in the Automatt's control room, engineer Castero tells Herbie: "Get the sound a little edgier, a little sawtoothier, a little square-wavier, if you know what I mean. I think the decay is too long."

Herbie has a different idea, and he tries another patch on the synthesizer. "Hmmm. let's see what we've got now," he mutters.

The process continues. He improvises another track, a revised composition, and very likely part of his new musical identity.
Automated Radio:
The Future Is Upon Us

by Todd Everett

Does your favorite radio station sound better lately? Do the announcers sound more professional, the music brighter and more consistent? Or don’t you pay enough attention to notice any difference? Well, listen closer. Because chances are what you’re hearing is a result of the biggest revolution in radio since the 30-record playlist: automated radio.

Automated stations broadcast every type of music, from country to classical, across this continent, Europe, and Asia. Virtually every one of the 7,500 or so stations in the U.S. is affected by it in varying degrees. A totally automated station can run completely by computer-directed hardware for days at a time without a human being within shouting distance. In fact, although the process is less than twenty years old, about 20% of this country’s stations are currently computer-run, including many of the highest-rated in the biggest markets.

The key to the whole system is the programming cartridge or “cart,” a piece of hardware that looks something like a standard 8-track cartridge and works in the same, endless-loop way though at 7 1/2 ips rather than the familiar 3 3/4. Jingles and most commercial copy have been on tape for years; more recently, program staffers in tightly formatted stations have been prerecording their playlist cuts on cartridges. The benefits are many. Any sound enhancements—re-equalization for a punchier sound, slight speeding up for brightness, editing to desired playtime—can be made in advance. Also, there’s no chance of playing the wrong side or of putting a scratchy copy on the air, and cueing is instantaneous and sure.

Early on a disc jockey or his engineer would manually insert cartridges into a player and press the ON button at the appropriate time to start the prerecorded music, commercial, news, weather, special report, contest, etc. Later, a switching system was developed: A 25-Hz cue tone coded onto a cartridge or open-reel tape automatically triggered a relay, stopping one cart and starting another. Computer memory units followed, and soon the cycle was limited theoretically only by the number of tape decks available to the station. Human hands, even to change tapes, could be eliminated.

There are three types of multiple-cartridge machines currently in use. One is a carousel, in which twenty-four cartridges rotate around a hub/playback head combination. The others are of the stacking-tray type, one with a separate playback mechanism for each cartridge tray in the system, the other with a single playback head for all and a motor that locates and cues each cartridge as it is needed. All three systems have their advantages and disadvantages—the carousel seems to be falling into disfavor due to its relative clumsiness and frequent upkeep problems, although it should be pointed out that most station equipment needs all but constant maintenance.

“A totally automated station can run . . . for days at a time without a human being within shouting distance.”

Of course it soon became evident to station managers that if all other elements of their programming could be automated, there should be a way to eliminate the disc jockey as well. There was—record all of the patter in advance. With this in mind, the reasons for automation’s rapid ascent become self-evident. Some of those reasons cause even the medium’s strongest proponents to become squeamish about being quoted. Most station managers I’ve talked to say that they’re either considering it or have done it for reasons of quality control. The guy down the street, though, has done it because it’s cheaper. Both justifications are valid.

Quality can be controlled, goes the argument, because the announcer’s voice tracks can be prerecorded. Pronunciation mistakes and fumbles can be corrected. Program content can be predetermined absolutely, an important factor in these days of sophisticated programming methods and highly paid consultants. As one particularly candid general manager says, “You can design the most perfect format in the world and have an announcer foul it up because he interjects his own tastes.” There’s no danger of that if the patter is recorded in advance.

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Also, taping can be done anywhere and by any announcer or personality. Syndication of these voices has become a highly lucrative business, as it can make any 250-watt rural station sound for all practical purposes like the big city’s highest-rated 50,000-watter. And why not? They use the same golden-toned deejays. Syndicators are careful that the same voice isn’t heard on competing stations in the same market, and some voices have a variety of air names for different stations.

“Having your local staff has its advantages, of course,” cautions a major-market program director. “The right guys can talk about local ball games, for instance, or what’s happening down at the corner store, and it’ll come out interesting. But how many right guys are there? The top-rated jocks on a major station can make upwards of $50,000 a year. Some earn hundreds of thousands of dollars, with doing commercials, hosting TV game shows, and all the rest. But there aren’t many of that quality around. What there are plenty of is the guys who are making two dollars an hour and who sound like it. Automation eliminated that problem.”

What it also eliminates is jobs. Since the announcer doesn’t have to wait through each song or news report, it takes him only half an hour to record a four-hour shift. One can easily do the work of the six or so who generally man a station. This, say the station managers, frees the staff to prepare their ad libs for the next day, write ad copy, sell air time to sponsors, cruise the local high school, sweep the studio, and still have time to read “Help Wanted” in Broadcasting.

Among the strongest opponents of automated radio are the schools that prepare the average voice on the street for a high-paying career on the air. (Columbia School of Broadcasting and Don Martin are two, along with the matchbook type.) Most of the careers aren’t that high-paying to begin with, and the number of openings is decreasing rapidly. Industry estimates indicate that only about five hundred people per year are hired as new, full-time disc jockeys, and that the average deejay earns less than $200 a week.

The number of engineers, too, is cut down radically when a station automates. Although a typical nonautomated station may have two or more licensed engineers on call to maintain and repair equipment (larger stations have engineers “produce” shows as well, handling the records and tape and freeing the deejay to simply announce), an automated station needs only one engineer to swab tape heads, grease wheels, and occasionally plug in a new printed circuit board. The Federal Communications Commission requires that one minimally licensed person be present at the transmitter at all times to read and log power dials and the like. Automated stations can even eliminate that person: KRLT in South Lake Tahoe, California, for instance, has had its meters installed near the telephone switchboard of a nearby hotel. When there’s no one in the studio or at the transmitters—after working hours or on weekends, for instance—hotel operators, holding the required and not-hard-to-get certifications, perform the monitoring and logging.

Still another personnel problem is eliminated by automation, at least at present. With the government’s strong minority hiring requirements, station owners are feeling strong pressure to hire more members of various social and ethnic groups than they may feel prudent. Their automated format, of course, serves as a disqualifier and transfers any pressure to the out-of-town syndicator.

And then there are those stations “down the street” who transfer to automation to save money.

“It soon became evident to station managers that... there should be a way to eliminate the disc jockey.”
How much money? A lot. An automated system that does everything except transmit broadcast signals costs anywhere from $20,000 to $70,000 complete. That investment can be amortized and depreciated; disc jockeys' and engineers' salaries can't be. Further, a sophisticated system can be leased for less than $1,200 a month, a price that puts it within the range of just about anybody who has enough money to buy a station in the first place.

But what exactly can a sophisticated automation system do? First, it can broadcast music, commercials, and prerecorded patter in any predetermined order. That order can be changed at any time by simply typing new commands into a computer via a standard typewriter keyboard. The program can be interrupted for network-feed newscasts or local time and weather signals. Live reporters in the field—at the scene of a breaking news story, from a sponsor's place of business, or anywhere else—can signal the computer with a remote device that looks like a cross between a calculator and a pocket beeper to put them on the air direct from any telephone. After completion of the live insert, the computer will continue the scheduled program, in correct sequence. Routine equipment malfunctions, such as tape breakage, can be automatically located and corrected within half a second. The computer can even turn room lights on and off and start the morning coffee pot. Its program can be adjusted via a terminal located anywhere in the world, as long as there are telephone lines to the station—the program director's living room, for instance, or a studio that is some distance from the transmitter. Every command can be recorded for after-the-fact study, and all broadcasted material can be automatically logged on an output terminal that looks and works something like

"Among the strongest opponents... are the schools that prepare the average voice on the street for a high-paying career on the air."
That device can be interfaced with a system that automates billing to clients, telling them exactly when and how long each commercial ran. And all of this equipment can run unattended for up to three days at a time!

Do the systems sound automated? They can and often do sound mechanical. This is especially true on so-called beautiful-music stations, playing background material often referred to as “wallpaper.” Selections are curtly back-announced with no emotion whatsoever, and the disc jockey sounds as though he is working a twenty-four-hour shift. But a carefully programmed system can fool all but the most alert of listeners. Announcers can prerecord jokes, telephone calls, conversations with a real or imaginary partner, make intentional mistakes, and do just about anything else that a spontaneous, on-the-air deejay can. Time checks are inserted by the computer from a prerecorded signal, using a system similar to the telephone company’s. First, every minute of the day is recorded by an announcer. Then the computer automatically advances that tape minute by minute, and when the time is called for, the playback head is engaged. (The system usually uses two cartridges; one with even and one with odd minutes, to allow for cueing and recycling time.) Local temperature readings are produced in the same way—by recording every possible temperature in advance. A sensor located outside the station determines what reading will be cued up at any particular time. More usually, though, weather reports are recorded with each news update. The only requirement is that the voice giving the time or temperature be either the same as that of the preprogrammed music announcer (this is done in advance, shift-by-shift) or otherwise accounted for (“...and now, here’s Joe Smith with the weather”).

There are mistakes, of course, and not always intentional ones designed to confuse the listener. Mis cues do take place from time to time, and are generally the fault of whoever put the 25-Hz signal on the program source. The computer’s time clocks are dead accurate. If a network news feed isn’t timed exactly, the newscaster may find himself cut off early by the return to local programming, and if the network put it on too early, his report might start in the middle of a sentence. Equipment breakdown does occur, though much of it can be corrected before the audience becomes aware of it. Proponents of automation point out that the computers make far fewer errors than their human counterparts.

If there is a battle between the revolution’s advocates and opponents—and there surely is—quality is not the main issue. It is money, both profits to the station and losses to those displaced by automation. In many markets, automated stations have captured the highest ratings and demand the highest premium for advertising time. There was a recent ratings upheaval in Los Angeles when KRLA, an automated outlet for a strange combination of rock oldies and contemporary sounds, beat out long-established Top-40 shouter KHJ, for years the undisputed champion of the teenybop market. (At least two more of the area’s currently top-ten-rated stations are fully automated, one a soft-rocker and one an outlet for beautiful music.) But even when the live stations can demand higher rates from sponsors, automation’s lower overhead, particularly in markets where the engineers’ and air talent’s unions are strongest, generates higher profits, even to lower-rated stations. To put it another way, the unions are pricing their members out of the business.

And, especially since the system’s proponents are for the most part station owners—the ones who have and spend the money—automation is surely the shape of radio’s future. Arguments against it may be valid, but for now radio promises to become as centralized and homogenized as television.

Next month, BACK BEAT’S music-business consultant, Jim Melanson, will discuss syndicated radio.
Quantum Audio QM-168 Recording Console. For those about to build an 8-track recording facility or add a 16-track remix capability to an existing studio, Quantum Audio has a new mixing desk that is a cut above the boards in the $2,000-$4,000 price range. The QM-168 has sixteen inputs, each with a mike/line selector and a 15-dB switchable pad at the mike preamp. Two echo send pots, two cue send pots, a panpot, eight bus switches, mute (cut) and momentary solo switches, and a low-noise conductive plastic fader are also included in each module. The equalizers are three-band, with each band selectable at one of two frequencies. The selection of eq. frequencies has always been a difficult decision, and Quantum seems to be trying to cover a lot of bases with a few players. For example, the high-end equalizer is selectable at either 4-kHz peaking or 12-kHz shelving, while the low-frequency equalizer offers either peaking at 300 Hz or shelving at 100 Hz. The midrange frequencies of 800 Hz and 1.8 kHz are both peaking.

The flexible monitor section is complete with a panpot on each channel, as well as a gain control and an on/off switch. TALKBACK has its own level control and automatically mutes the control-room monitors when depressed. It can be fed to studio speakers, cue buses, and program outputs by means of selector switches located near it. Also in the monitor section are the two cue masters and the echo return masters, which may be assigned to four different buses for mixing. The back of the Model QM-168 has thirty-two XLR connectors for microphone and line inputs, two for echo send and two for echo return, and eight more for program outputs. Phone jacks include control-room monitor, studio monitor, and cue output. Molex connectors are also mounted in the back panel for connecting the power supply, an optional patchbay, and optional 16-channel direct units. Phantom powering for condenser microphones is also available as an option.

Microphone inputs are balanced 1,200-ohm lines. Line inputs are unbalanced, as are the echo returns and the program outputs. All monitor lines are high impedance, 2,500 ohms, and maximum level is +21 dBm. Frequency response of the console is rated at ±1 dB from 20 Hz to 20 kHz, and distortion is specified as less than 0.1% THD from +4 dBm to +18 dBm into a 600-ohm load. Model QM-168 requires 120V AC, 60 watts, weighs 75 pounds, and measures 28 by 20 by 8.5 inches.

This looks to be a very versatile mixing desk and has many of the features not usually found on the less expensive boards. Little things like panpots on the monitor selectors, built-in talkback with a level control, and two cue mixes enabling a stereo headphone mix for overdubbing make all the difference when you spend a lot of time working at a console. All the switches feel good, if a trifle small, but the compactness of this unit is a blessing for installations where space is at a premium. The QM-168 retails for $5,900.

CIRCLE 121 ON READER-SERVICE CARD

Acoustic 115 Amplifier. This is a very attractive instrument whose well-defined, recessed control panel uses status lights (LEDs) to indicate power, reverb, and volume conditions. There are two inputs marked 0 and -10, the latter for instruments with a higher signal output. Adjust to them is the BRIGHT switch, followed by the VOLUME, BASS, MIDRANGE, and TREBLE controls. REVERB and MASTER VOLUME are both activated by means of a durable external footswitch (supplied), making it possible to have two preset volumes, one for lead and one for rhythm playing. The decay of the reverb unit is exceptionally smooth, and the range of both volume controls very broad.

Aside from FOOTSWITCH, back-panel jacks include PREAMP OUTPUT and POWER AMP INPUT for patching in an external-effects device such as an equalizer or echoplex. In the studio, PREAMP OUTPUT can also be used to drive a direct line to the board without interrupting the signal to the power amp. (On some of the models, a notation under PREAMP OUTPUT incorrectly states "disconnects preamp output." The manufacturer informs me that it belongs instead under...
POWER AMP INPUT. So it goes.)

The overall picture is dimmed somewhat by the fact that the Model 115 doesn’t quite deliver the clarity or fullness of sound we would like to hear. While distortion and special effects seem to be the order of the day, there are still times when a musician just wants to plug in and play it straight. There is also a tendency for the amp to distort somewhat when fed by a hot signal source, and I was told by the technician at Acoustic that he uses the -10 input when playing his guitar. Reports from our field-testing musicians ran from “sounds all right” to some less flattering remarks. Basically the Model 115 is a good amp with room for improvement. It measures 22 by 21 by 10 inches, is rated 50 watts continuous, and sells for $399.

CIRCLE 123 ON READER-SERVICE CARD

Hohner 1250 Lead Guitar Amplifier. The 1250 tops Hohner’s new line of musical instrument amplifiers, which ranges from the 8-watt student model to the 60-watt bass amp. This one is a well-thought-out package of controls and options built around an amplifier that is unfortunately not good enough to take advantage of them. We field-tested the Model 1250 with a Fender Telecaster, ARP Odyssey synthesizer, and a Fender Rhodes piano but found in each case that it overloaded and broke up very easily with our attempts to produce an ordinary clean sound. No matter what combination of preamp and power amp settings we used, this sound remained thin and lacked the characteristic “body” found in better amps.

Front-panel controls include BRIGHT, NORMAL, and KEYBOARD INPUT JACKS, PREAMP and MASTER volume controls, BASS, MIDRANGE, and TREBLE eq., a REV- ERM control, RATE and DEPTH for the built-in low-frequency oscillator, and an EFFECT selector. The inclusion of the oscillator is a great idea and enables the user to create some marvelous effects without the use of outboard equipment. By applying the low-frequency modulating signal to the input, you can achieve tremolo, vary the depth and go about as far out as you might imagine. EFFECT permits switching from one preset effect to another. The REV- ERM control is attached to a small Accutronics spring, and the back of the amplifier has jacks for an optional Quadra-Sound Foot-Switch and preamp output.

It was puzzling to see all of these well-thought-out controls sitting atop a not-so-well-sounding amp. Just to double-check our instruments and cables, we plugged into the old reliable Fender Pro Reverb and Polytone amps. But the signals were just what we’d always heard and been pleased with, proving that our ears weren’t deceiving us. The Model 1250 is rated at 60 watts rms, has two 12-inch speakers, a two-conductor AC plug, and a MIDRANGE control that appears to be more decorative than functional. Oddly, there is no polarity switch, making it necessary to reverse the plug at the wall socket if and when hum persists. The unit weighs approximately 45 pounds, measures 21 1/2 by 26 by 9 1/2 inches, and retails for $319.50.

CIRCLE 122 ON READER-SERVICE CARD

Hohner 1250 Lead Guitar Amp

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CIRCLE 23 ON READER-SERVICE CARD
If You Can't Afford More Mikes . . .
Try Binaural
by John Woram

By the time these words see print, the last vestiges of the nationwide epidemic of delirium bicenten-nialis presumably will have run their course. The country will be back to what passes for normal, and we may begin taking small pleasure in realizing that before tricentennial fever strikes we shall all have been long since done in.

Of course, those of us who are addicted to the paraphernalia of sound recording are not out of the woods just yet, for this year marks the centennial of sound recording. Now, what better way to celebrate than to sell off your car, house, or whatever, go out and buy a trunkful of microphones, and plunge full tilt into the recording scene? Admit it: You've been toying with the idea, haven't you? Or are you just reading "Studio Circuit" because your copy of the Wall Street Journal didn't show up on time? Well, we know better.

Chances are, you want to honor the centennial by making better recordings than ever. And for this, you'll need lots and lots of microphones, right? Not necessarily—more does not always mean better. True, you'll often wish you had a caseful, but sometimes you can do as good a job or better with only two. In fact, if you really use your head, you can come up with a recording superior in sound quality to anything you've bought in the store recently, because many commercial LPs would have been better if fewer microphones had been used in recording.

That may sound like a put-down to those who think that a session is not "happening" unless you can't see the musicians through the forest of microphone stands. But think about it for a moment. When you go to a concert or listen to a recording, how many ears do you use? The answer raises yet another question: Why do we need more microphones than ears? And wouldn't it be nice if we could use our ears more directly in the recording process?

Psycho-acousticians will quickly explain that our concert hall experiences involve a complex mixture of all the senses: hearing, certainly, but also sight and, to a lesser extent, smell, touch, and taste. Since the phonograph record captures only sound, it can be argued that that sound needs some enhancement to make up for the missing ingredients of the live performance. The recording, it might be said, should also be somewhat "larger than life" in order to survive the transfer to disc or tape.

Even the ancients assumed this—photos of Toscanini conducting the NBC Symphony reveal three microphones suspended some fifteen feet above the stage. Some years later, a total of nine microphones was used for the Leinsdorf recording of Lohengrin. The outputs of the three on the orchestra were combined to give a good left-center-right blend of the instrumental ensemble. Two additional sets of left, center, and right microphones were set up, one to favor the soloist, the other to favor the chorus. All of this gave the engineer the control he needed to get just the right blend of forces and achieve a convincing replica of the original performance. Well, then, why not go several steps further and put a microphone on each section of the orchestra and chorus? Then the engineer could balance the timpani against the harp, the horns against the bassoons, the sopranos and altos against the tenors and basses, and so on.

Stop! It's time to think again. Yes, the engineer would have greater control, but you wouldn't like what you heard. For now we've gone too far. You—the concertgoer—hear each subsection as it arrives at your listening position. Obviously, the front-row violins are a lot closer than the altos on the rear riser. But the microphones, each placed very close to a subsection, will pick them up simultaneously. Microphone 1 picks up its instruments at the same instant that microphone 2 does, and so on throughout the entire ensemble. The result is a truly instantaneous recording, and your ear rebels. And no wonder, for it cannot be everywhere at
An early “multimike” setup: Toscanini & the NBC Symphony once and has never heard anything like this before!

The moral of the story is that, for convincing, realistic sound reproduction of almost any live performance, the fewer microphones the better. Keep in mind that the chart-bound pop multitrack recording, which uses sixteen or more microphones, is not a live performance; rather it is a recording performance with a different—though equally valid—set of values from those of the live situation.

So we seem to have two distinct methods of recording. In the first, we use very few microphones and capture some sense of acoustic perspective. (The technique is less common in jazz and rock than in classical performance but should be used if that kind of ambience is desired.) Once the microphone setup has been worked out, the engineer will have relatively little control as the recording progresses or during postsession rebalancing. On the other hand, the multimike exercise places the engineer in almost complete command of the forces marshaled on the other side of the control-room window. Balances may be set and reset ad infinitum, but the recording won’t ever have a sense of performing-hall realism. A host of signal-processing devices—from digital delay lines to electronic reverberation chambers—are available to simulate the missing ambience, and although these gadgets are impressive, they cannot replace the real thing.

The successful engineer—whether a full-time professional in the most up-to-date super-star studio or a talented semipro working off the back of a station wagon—should know when to use twenty microphones and when to use two. Both techniques have their advantages, but it is important to remember that neither offers the best of both worlds. It’s always a tradeoff of control for perspective or vice versa.

Until now, we’ve been talking about the microphone’s performance as a sort of surrogate ear. But what about the ear itself becoming a surrogate micro-

phone? Not really possible, but there is a recording technique that is perhaps the next best thing: binaural (“two ears”) sound. Somewhat like the periodic reinvention of the wheel, in the last year or two people have been rediscovering the joys of binaural recording—some of these being its utter simplicity, startling realism, and, best of all, low cost.

A little background on the differences between stereo and binaural sound may be in order. Almost a quarter of a century ago, William B. Snow wrote, “It has been aptly said that the binaural system transports the listener to the original scene, whereas the stereophonic system transports the sound source to the listener’s room.” On the off chance that the quotation doesn’t answer all of your questions about binaural sound, let’s reconsider the advantages of the ideal two-microphone recording session. Presumably, one microphone will favor the left side, the other the right, with center information picked up equally by both. The listener will of course hear the left microphone from the left speaker, and so on. Since the distances between the microphones, the speakers, and the ears are tenuously related at best, something happens to that ultimate realism. It may be spectacular, yet it’s not quite the same as being there. The solution is deceptively simple—but it has a built-in catch.

The first step in binaural recording is to build or buy a “dummy head,” that is, a model with the general size, shape, and acoustical characteristics of the human head. Then put a small omnidirectional microphone at each ear location. Like the ear itself, the omnidirectional microphone hears sounds arriving from all directions. Of course, the dummy head interferes

**The Basic Principles of Stereophonic Sound.” Journal of the Society of Motion Picture and Television Engineers, Inc., November 1953.**
with those sounds arriving from the opposite side of the room, but that's exactly what your own head does.

Now set up the dummy head in an optimum listening location at the recording site, and with each microphone record onto a separate track of your tape recorder. Listen to the playback through headphones. and you'll hear an incredibly realistic recording. If you didn't know better, you'd swear the performance was actually taking place before you. And why not, for the headphones have, in effect, transported your ears back to the recording site.

And now for the catch. What will this binaural recording sound like when played through speakers? Unfortunately, it does not stand up very well at all and comes out sounding almost monaural. To understand why, let's reconsider that dummy-head recording session. Actually, each microphone hears pretty much the same thing (just as your ears do), with only some barely perceptible time-of-arrival differences—after all, the microphones are hardly a foot apart. But it is just this sort of information that your brain requires to create the sense of “being there.”

When these almost identical signals are played through loudspeakers, both ears hear both signals and your brain can no longer tell them apart. So you hear what sounds like a just so-so monaural recording. Perhaps it is for this reason that, up until recently, binaural recordings have not really caught on with the public. After all, most casual listeners use speakers. If a recording doesn't sound so hot in conventional stereo, it just won't sell.

But lately, the semipro (or advanced amateur, if you prefer) has been doing his own recording. He or she roam the countryside looking for interesting performances to record. What is needed is a simple yet effective (and inexpensive) method of capturing these performances. The ultimate goal is not a chart-busting gold record, but merely a functional recording for personal use.

Under the circumstances, binaural recording becomes a natural. In fact, the Victor Company of Japan (JVC) has taken the process one step further by introducing a combination stereo-headphone/binaural-microphone system. The user simply wears the headset while recording. Built into the outer shell of each ear cup is a tiny microphone. The headphone wearer becomes his own dummy head (no snappy comments permitted) and, via his tape recorder electronics, hears the binaural recording as it is being made. Of course, the recording may be played back later over any stereo headphones.

For binaural recording, there's really no point to having a console, so with a reliable cassette deck on a shoulder strap, anyone can become his own walking recording studio. It can get to be a bit of a strain trying to keep very still during the recording, but this is important, since slight head movements affect the binaural pickup. During playback, the room will seem to move about—an interesting novelty effect that in time becomes annoying. For this reason, it makes sense to mount the system on its own dummy head, which can then be placed on a microphone stand.

With the introduction of low-cost binaural recording systems, and their increasing popularity with semipro recordists, there is every reason to look for an eventual increase in the number of commercially available binaural recordings. At the moment, there are but a handful around, most of fair-to-middling musical interest.

But what if the binaural sensation could somehow be transferred to loudspeaker reproduction? Well, maybe it can. Still in the research and development stage is JVC's biphonic system, a speaker reproduction system in which sounds seem to originate not only from the speakers, but from the area between the listener and the speakers. JVC has been demonstrating the system at college shows and audio conventions around the country, and one of the great pleasures of attending these demos is to watch the incredulous looks as disembodied voices seem to leave the speakers and advance toward the listener.

Although biphonic sound is not yet commercially available, most readers have been around long enough to know that today's blue-sky research project will be taken for granted by tomorrow's recordists. In the meantime, try a little binaural. It may get you started recording with a minimum of fuss and a maximum of enjoyment. Then again, you might want to stay with the twenty-microphone setup. The important thing to realize is that there is more than one way to make a recording, and no one technique is right all the time.
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James Taylor: No More Kinks
by Sam Sutherland

James Taylor's records have chronicled a mellowing process that continues to make orthodox rock fans—and critics in particular—rather uncomfortable. Although his first two albums drew musical and verbal shape more from folk and country idioms than from rock & roll, the result was a crucial '60s archetype of the psychically bruised, ultimately romantic singer/songwriter. It was a portentous role, perfectly mirrored by his early, typically contemplative metaphoric observations. But by acknowledging that his life now revolves around marriage, kids, and the quiet anxiety of the '70s, Taylor admits cautious optimism and transforms his impact. As his gentle humor and essential sentimentality come to the fore, the new effect becomes soothing rather than disturbing.

In light of that shift, both Taylor and his various mid-'70s producers have sought to spice his more relaxed material with a broader instrumental range. When Lenny Waronker and Russ Titelman assumed the producers' mantle with "Gorilla" (1975), they augmented the artist's long-term studio and stage partners, The Session, with a variety of other rhythm players and soloists chosen to complement him. The resulting tracks were typically elegant, the playing expert and intelligent. Yet shifting the focus away from Taylor's voice and guitar offtakes, the larger forces striking an uneasy compromise with the artist's passivity.

With his move to Columbia, Taylor has been reunited in the studio with Peter Asher (see BACKBEAT, June '77), his manager since the late '60s and, as producer, the co-creator of Taylor's basic recorded personality on his first four albums. Asher's understanding of his client's appeal has led him to move back toward the original, with instrumental support focused on The Session—Danny Kortchmar (guitar), Dr. Clarence McDonald (keyboards), Lee Sklar (bass), and Russ Kunkel (drums). There are occasional elements of '70s pop—the discolored rhythm guitar that lightly pushes Your Smiling Face and the razor-edged, harmonizing slide guitars that flash menacingly in I Was Only Telling a Lie—but the basic arranging style restores the old intimacy. Asher and engineer Val Garay have emphasized that scale with typical clarity and detail in their production work, while preserving a looser, occasionally gritty energy.

Yet, ultimately, "JT" is most convincing as a singer's record, not as a collection of new songs. Taylor's conservatism as a lyricist, and an introspection now robbed of its disturbing force (on There We Are, he and his wife are "like children forever/Taking care of one another/While the world goes on without us. . ."), fill many of his newer songs with echoes of his earliest work. Only when his meditations turn toward an underlying desperation—as in the gentle alienation of Another Grey Morning—does he approach the gravity of his best.

The album's highlights turn out to be Taylor's interpretations of two non-originales. On Handy Man, a venerable rocker, producer and singer encapsulate their low-key romanticism, translating an ebullient advertisement for sexual prowess into a dewy-eyed ballad paced by clapping percussion and shaded by Leah Kunkel's subtly aching backing vocals. The result is a Loony, Don't Leave L.A. singer and band create a polar opposite of Handy Man. Launched by a volley of raw, Stones-flavored

Burton Cummings is no innovator. His inspiration is drawn not from trailblazers, but from journeymen: It's Bob Seger and Steve Miller who are cited in the album dedication for their contribution "to rock & roll as a modern art form." Of course both Seger and Miller have had highly successful albums after years of plugging away in the ranks of the almost-prominent, and Cummings, former lead singer of the Guess Who, would like to follow their example.

But the title of his second attempt is pure bravado. "My Own Way to Rock" is closer to pop. Producer Richard Perry may have toughened up a collection of Cummings' own, often-unfocused compositions by including songs by Seger, Leiber and Stoller, and the Righteous Brothers, but these are presented in an unusually soft-spoken manner. The result is a kind of elegant pop, which as it turns out is better suited to Cummings' talents than raw frenzy anyway.

Amid the Guess Who's barrage of electric guitars, his growls habitually sounded posed rather than properly possessed. Perry's relaxed settings have turned those mannerisms to Cummings' advantage, emphasizing the nice guy under the grit. As a result, on cuts like Come on By (in which a rock & roll stud proposition's a young lady fan) he sounds humorously self-deprecating instead of overanxiously macho. His limitations are more evident on the softer ballads like his own Timeless Love, but Perry's touches—chiming background vocals, simplified instrumentation—again provide what his client presumably left at home.

Modesty, like discretion, is one of the deadly sins of rock. But in Cummings' case, willingness to confine self-assertion to the album cover photo is a saving grace. It won't make him a rock & roller, but it may make him a hit.

Peter Frampton: I'm in You. Peter Frampton, producer. A&M SP 4704, $7.98. Tape: (Cassette) CS 4704, (8-Track) BT 4704, $7.98.

Peter Frampton's first album since the monolithic "Frampton Comes Alive!" can't really hope to compete with its predecessor's strengths. "Alive!" eclipsed his previously modest success by racking up more sales than any LP in the history of the American record business, largely because the artist had used the two-disc/concert format to frame his best songs from four studio albums. So even with its single-LP length, lower price, and the inclusion of two covers, "I'm in You" forces Frampton to compete with his own earlier pragmatism. Instead of five years, he's had just more than one to finish these songs, and, despite the confident punch of the playing and an equally upbeat—and marginally obsequious—liner comment assuring us Peter's revved up indeed, the gap shows.

Part of the problem lies in a gradual shift toward a more melodic pop style that was positively obscured on "Alive!". Love songs that plumbed a sometimes claying innocence (like the hit singles Show Me the Way and Baby I Love Your Way, both originally written by racking up more sales than any LP in the history of the American record business, largely because the artist had used the two-disc/concert format to frame his best songs from four studio albums. So even with its single-LP length, lower price, and the inclusion of two covers, "I'm in You" forces Frampton to compete with his own earlier pragmatism. Instead of five years, he's had just more than one to finish these songs, and, despite the confident punch of the playing and an equally upbeat—and marginally obsequious—liner comment assuring us Peter's revved up indeed, the gap shows.

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Ry Cooder—hot stuff

The best thing about Ry Cooder is his producer. Warner Bros. BS 3059, $7.98. Tape: (Cassette) M5 3059, (8-Track) M8 3059, $7.97.

The dumbest hillbilly band makes better music than the purest, most socially aware folk singer. You get the feeling listening to his peculiar sort of eclecticism that Cooder would cut a Nazi march if the case, willingness to confine self-assertion
seems mannered and jejune.

Yet Frampton's success can't be dismissed as a fluke, and his canny preservation of the production and arranging styles of earlier albums (he has produced himself since the outset of his solo career) does succeed in giving "I'm in You" continuity of style, if not substance. The partial success of his more hard-edged songs, like Tried to Love, shows he is still capable of convincing rock. But as long as he chooses to blunt that impact with sentimentality, as he does here, Frampton's work falls short of the scope it once promised.


After a flurry of synthesizers, a high voice floats like smoke in a breeze, then bursts in a shower of petals. Aretha annihilating the opposition in the first four bars of Break It to Me Gently. Not only by her voice, though that's still as easy with tenderness and power. Not just by her sense of timing, though she plays with the beat like a cat with a feather. Above all by something more important than either: the subordination of technique to interpretation, turning craft into art.

That art is almost everywhere on "Sweet Passion." In When I Think About You there's a vocal break that reminds us Aretha Franklin was a founder of the soul-ballad—its like something Louis Armstrong might have played. driving it all home with simplicity and power. Every tone in the slow ballad What I Did for Love is polished with total concern for both the individual phrase and the progress of the lyric. A Tender Touch is a classic example of her approach to her own lyrics, moving through tentative and shifting moods to a final moment of resolution and decision.

And then there's the uptempo Aretha. Touch Me Up, a sexy piece backed by gutty punchy brass, moves from challenge to exultancy with the sinewiness of maturity—self-assured and outgoing, not trickily seductive. In Clark Terry's jovial scat vehicle Mumbles, she takes another successful shot at the opposition: Her scat-singing is square on the beat compared with either the great jazz singers or with Aretha herself in gospel vein, but it's engaging enough to suit Terry's hammy cheerfulness.

So far, so splendid. Unfortunately, not everything is this rosy. Some of Lamont Dozier's production is dandy, but some is overornate. As Touch Me Up is enhanced by tasty brass and backup vocals, What I Did for Love goes under to the all-too-familiar five-and-dime strings and yoyos going "ooo-ooo" in the background. Nor is Aretha herself consistently on form. The title cut opens admirably with guilty-low piano by Franklin herself, spitting brass, simple strings that (for once) work, and a vocal that moves from earth-mamma to an equally physical but more lyrical vein. But the piece doesn't build from this beginning. it just goes on 'til it stops.

There are three real duds. After a crisp and simple guitar and keyboards opening, overproduction and lack of conviction sink No One Could Ever Love You More. Meadows of Springtime never recovers from its film-score-pastoral start, and the spoken introduction is only slightly less embarrassing than most. And Sunshine Will Never Be the Same is a tiresome and undistinguished piece of musical wallpaper. Aretha sings it as if it matters, but it doesn't.

Duds are duds, and a pity, but six-to-four on is about the best odds life offers. More important, Aretha at her frequent best still explores the emotional ramifications of sex in a way that her rivals can't approach and most of the givewinders can hardly comprehend. J.S.R.


It's a mystery to almost everyone who's heard him—and especially to Warner Bros.—why Al Jarreau has not yet made a bigger splash in the stormy seas of the recording business. He seems to have all the natural qualifications: good looks, spectacular stage presence, and an abundance of musical gifts. So, since his studio work has thus far failed to produce a solid hit, the obvious next step was to drag out the mobile units and record him in concert. But Warners went one step further: They recorded him in the extremely felicitous environs of a European tour, singing a lively mixture of original material and unhackneyed pieces by outside composers.

Well, sad to say, Jarreau still hasn't produced a commercial record. If anything, "Look to the Rainbow" includes some of the least commercial, least compromising work I've ever heard from him. The tracks are almost all more than six minutes in length, which is not precisely the way to break into the Top 40 singles market. And Jarreau's backing—fine, workmanlike support that it is—it's never more than a platform for him to stand on. In these days of heavy production and dense sound, that is not going to cause AM program directors to jump for joy either.

But wait a minute, there's another consideration to keep in mind: Jarreau doesn't seem to give too much of a damn about all of this, and his company is willing, for the moment, to let him do things his own way, even if the results don't satisfy the accountants.

That's good news to anyone who cares about hearing a gifted musician work in his own medium. Jarreau's is obviously
live performance. He plays to, interacts with, and delights in that kind of contact that drives too many pop performers up the wall. The essence of his art is the building of intensity—getting into a song to the point where he is past the lyrics, past the sometimes-silly rhetoric of pop sentimentality, and into a vamping, bouncing, rhythmically energizing examination of the inside of the music. He uses his voice like an instrument. (Yes, I know that’s a cliche, but for once it’s an accurate description.) He buzzes, hums, shapes his mouth to change the resonance of a tone four different times before letting it go, and improves like a world-class jazzman. He is that most ironic of entities—a performer who starts at pop music and winds up at jazz.

If there are problems here, they are due mostly to the overenthusiasm and lack of perspective that are inevitable in live recordings: Too many of the tracks, especially Jarreau’s songs, have similar tempos and similar harmonic and rhythmic patterns. Not even Jarreau is good enough to sustain our listening interest for, say, three or four six-minute, middle-tempo rhythm tunes. (Of course becoming part of the aura of his live action would be a different story.) And his interpretations of some of the other material—the title cut and Better Than Anything in particular—are eccentric to the point of confusion.

His absolutely superb updating of Paul Desmond’s lightweight Take Five, however, is a wonder to hear. I can think of no other singer who would have the guts to even try to cut it in 5/4. Jarreau not only gets past the usual meter, but makes it work in a way that vastly improves on the original material. No, it’s not commercial, but it is Al Jarreau, and that’s something.


Well, Keith Jarrett’s back at his solo piano again, out to confuse and delight all those people who can’t listen to music without finding a label for it. They won’t find much relief here. His four excursions through the width, breadth, and depth of the acoustic piano—each an album-side in length—are unclassifiable in any traditional sense, but there is one convincing statement that can be made about them: They only could have been played by a musician who knows and understands jazz.

This outing, Jarrett’s first solo effort since the impressive “Koln Concert” (ECM 1064 and 1065), was recorded in Paris in 1976; it is also the first solo studio album he has made since 1971. While “Staircase” may lack some of the energy and spontaneous enthusiasm of the Cologne recordings, it more than compensates with some of the most fascinating, complex-yet-passionate piano improvisations I’ve ever heard. I say “improvisations” with some trepidation. Jarrett chooses not to inform us—nor should he—how much of his music is impromptu, how much planned. Yet linkages and intersections of ideas all have the feel of sudden inspiration rather than rational preplanning. One could probably best describe his method as through-improvisation: absolute music in the purest, most immediate sense.

Jarrett has assigned a title to each side: Staircase (with three movements); Hourglass (with two movements); Sundial (with three movements); and Sand (with three movements). The titles are significant, presumably, to the composer, but they are in no way programmatic. Which is interesting, since despite its nonprogrammatic origins his music is deeply rooted in an almost nineteenth-century romanticism; powerful images course through virtually everything he plays.

Staircase begins with a lyrical, exploratory, even a trifle tentative stance. Jarrett lets things hang for most of the first movement but in the second bursts out with a busy, extremely complex polyrhythmic improvisation that actually builds in intensity for nearly eight minutes. It’s an extraordinary performance. The final brief movement is like taking a deep breath, a gentle, epigrammatic meditation on the album; it cooks with a rhythmic improvisation: absolute music in the purest, most immediate sense.

The second movement of Hourglass changes pace so dramatically that it might easily have been split into two. The first movement is Jarrett’s closest approach to straight-ahead jazz improvisation on the album; it cooks with a near-funky left-hand pattern that builds insistently and continuously. Starting off the second is a jaunty, Continental air that metamorphoses into a beautiful, soaring melody. (Jarrett seems to catch up in it that one can hear almost imperceptible pauses in his line as he waits for just a millisecond—to hear where his muse will lead him.)

Sundial holds together extremely well structurally. Percussive left-hand melodies lead the way in the moody and declamative first movement. What follows is busy and interactive, as in Staircase, two hands moving in almost continuous counterpoint to each other, interrupting the line here and there, as it builds, to interject massive struck chords. The final movement is lyrical and moody again, with enough traces of Tatum to remind us of Jarrett’s noble predecessor on the piano.

Continued on page 141
Steve Winwood's first solo album arrives exactly ten years after the unveiling of his longest-lived and most influential band, Traffic, and that timing amplifies the record's subtle but persuasive sense of history. Indeed, Traffic fans will likely view this effort's arrival as seven years late, for he began work on a solo LP in 1969 only to transform it into the group's reunion, "John Barleycorn Must Die." Although "Steve Winwood" continues Traffic's atmospheric use of eclectic instrumental details culled from jazz and Third World music, its compact arrangements and supple pacing also suggest a partial return to the r&b classicism of his first records with the Spencer Davis Group in the mid-Sixties.

His potential as a soloist has been obvious from the beginning of his career. At the age of fifteen, he made his debut with an astonishing single hit, "Gimme Some Lovin,' which carried the Davis name but drew its furious momentum from Winwood's raw, jubilant blues shout, soaring organ lines, and romping piano. That record and an even tougher follow-up, "I'm a Man," were classic blue-eyed soul records: Winwood's authority over his material, even then largely self-composed, could easily be mistaken for the work of some rough-but-ready new soul contender or a canny white interloper like Detroit's Mitch Ryder or New York's Young Rascals. Chart success, though, revealed that the source of that gruff yet agile voice and those surging keyboard choruses was a Birmingham, England, teenager barely out of short pants.

With Traffic, that hearty blues machismo role changed dramatically. The moody austerity of their later music and the introspective surrealism of both Jim Capaldi's and Winwood's lyrics made the band's best records dark, emotionally haunted mindscapes.

While that fatalism remains an undercurrent on this album, especially on the most successful cut, "Midland Maniac," the new songs seldom allude directly to either Traffic's austere impressionism or the Davis group's propulsive white soul. Instead, there is a greater range of tempos and an emphasis on comparatively upbeat declarations of love and devotion ("Hold On" and "Let Me Make Something in Your Life"). And Winwood's supporting players—generally held to small ensembles for each song and drawing from his former Traffic partners like Capaldi and Rebop Kwaku Baah as well as English and American musicians—add a number of modest but effective r&b touches to his lush organ settings.

"Time Is Running Out," a track that may dismay older fans and invite accusations of incipient discoism, exemplifies this renewed affection for r&b through its use of galloping clavinet, chanted unison vocals, and intricate rhythm guitar figures. But Winwood's awareness of contemporary black music cannot be confused with wholesale appropriation: Those same traits can be found in early Spencer Davis Group records. And Capaldi's threatening lyric, laced as it is with ecological images, seems a far cry from the feral silliness of most disco lyrics.

The most affecting songs here are those that bridge the extremes of brisk rhythm playing and introspective ballads. On "Midland Maniac," "Vacant Chair," and "Hold On," he has mated medium tempo ballads with a restrained but hypnotic undertow of syncopated rhythm parts and percussion effects. On "Maniac," the best of these, stately organ and vocal legato achieve a striking tension when pitted against that bubbling chassis of bass, drums, guitar, and piano. Similarly, "Vacant Chair," with lyrics by Viv Stanshall, is a meditation on death that employs that same tension to build toward a lovely, if baffling, refrain sung in what I'd guess to be a Near Eastern or African language.

On this album, Winwood reconciles the lost innocence and spiritual anguish that were recurrent Traffic themes with the simpler energy of his earliest work. If his reserve prevents him from broadening to the full potential of his talents he still succeeds in defeating any contention that his powers as a singer, songwriter, and musician have waned. "Steve Winwood" is flawed but compelling proof that, at twenty-eight, the artist is still capable of encouraging growth.

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Sand is somewhat jazz-like in its opening, notably because of a persistent ostinato bass line. The second movement is pastoral in feel, recalling the darker sections of Mendelssohn's *Scotch Symphony*, and is succeeded by the lullaby strains of the third. Jarrett wraps it up with a shadowy recollection of the parallel-fifth ostinato in the opening.

Unquestionably, all this is quite an achievement. Unlike the jazz piano soloists of the past, Jarrett does not use predetermined chords of popular tunes with the built-in comfort of sectionalization, contrast, harmonic colors, etc. Starting from scratch, he must provide everything and this can cause problems. Since his orientation is romantic rather than contemporary, his choices are limited. He lacks—to go to the other end of the spectrum—the technical virtuosity of a Liszt and the harmonic complexity of a Chopin. Of course, he does not have the benefit of precomposition. Nonetheless, he has a tendency to fall into patterns that are more persistently sequential than they need be and into harmonies and modalities that lack chromatic potential. In part, that is simply a matter of aesthetic style, choice, and manner. But I suspect that as Jarrett develops and matures, his musical palette will become more expansive. In the long run he will, I think, become one of the important musical voices of our time—regardless of how he classifies his music.

D.H.

**Willie Nelson: To Lefty from Willie.**

Willie Nelson, producer. *Columbia/Lone Star* 34695, $5.98. Tape: CT 34695, CA 34695, $6.98.

In the early '50s, those years between the end of the classical honky-tonk era and the dawn of rockabilly, two men ruled country music: Hank Williams and Lefty Frizzell. Of the two, Frizzell was the more popular, and the greater singer. But Hank died at the age of twenty-nine, in 1953, and the tragedy of his death lent myth to his life. He is still regarded as the ultimate and archetypal country singer. Lefty Frizzell died in 1974 at the age of forty-seven, forgotten and unmythified.

Lefty's achievement, beyond his awesome powers of voice, was the deepening and broadening of the sensibilities of Texas honky-tonk music. He was a poet but not a wimp, a country singer but not a hick. Of the many younger artists he inspired (George Jones, Merle Haggard, even Elvis Presley), Willie Nelson learned best, and you can hear a little—sometimes a lot—of Lefty in all of Willie's best work.

The first side of this album consists of Frizzell songs from 1950 and '51, the earliest and most successful years of his recording career. Nelson chose the more melancholy pieces: *Mom and Dad's Waltz, Look What Thoughts Will Do*, and those eerie love songs, such as *I Love...*

Continued on page 144

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This is the revival of a trio that was one of the best avant-garde jazz ensembles of the Sixties. Recorded last year at a Japanese music festival, "Japan Suite" includes what sounds like two extended improvisations—one on each side of the album. Pianist Bley's playing is as astonishing as ever—one wonders why he has never received more attention. Peacock's return to jazz after a lengthy hiatus should enliven the future of the acoustic bass, and Altschul is the very model of the modern jazz percussionist. World class contemporary jazz playing, all around.


Recorded in 1956, at the same time as Farlow's earlier disc, "Fuerst Set" (Xanadu 109), this is a special treasure for followers of Eddie Costa, the brilliant pianist who died in 1962. With Vinnie Burke on bass and Farlow on guitar, he has the accompaniment and the space to fully develop the earthy, driving momentum of his urgent, hammered phrases upon which he built his solos. Farlow and Burke get their chances, too (it's a very relaxed session), but it's Costa—both as soloist and in the closed, responsive ensemble passages—who makes the set special.


During the Ellington band's 1968 tour of South America, two members—tenor saxophonist Gonsalves and trumpeter Willie Cook—recorded this set with an Argentinian rhythm section. Gonsalves gets away from the grinding cliches that took too much of his time with Ellington and instead emphasizes his lovely, warm ballad style. Even an uptempo Perdido is done with substance and taste. Still more impressive is Cook, a trumpeter rarely recorded and almost never unaccompanied duets with guitarist Bucky Pizzarelli. He also leads a sextet, with Kenny Davern on soprano sax, that swings through some pop standards and combines the best of traditional and contemporary jazz. The combination of these two streams and Vache's own polish and assurance make the disc unusually fresh and vital.


Ronnie Laws is the latest member of his gifted family to hit the big time. But his gifts have been obscured by the formulaic success of his first two albums, "Pressure Sensitive" and "Fever." Like them, "Friends and Strangers" is a predictable stroll down the disco/jazz lane: Swooping synthesizers, squeaking strings, and endlessly repetitive rhythm patterns peer out from behind every bush. Dull stuff; but if all you want is to move your feet and let your brain go out to lunch, Laws will help you do it.

David Murray: Low Class Conspiracy. Michael Cuscuna, producer, Adelphi AD 5002, $6.95.

The popularity of disco/jazz notwithstanding, an important new generation of young jazz musicians is arriving. Tenor saxophonist David Murray, freshly minted from a mod that bears traces of Ornette Coleman, Eric Dolphy, and Albert Ayler, is one of the most important. In the stark confines of a trio situation—with bassist Fred Hopkins and drummer Phillip Wilson—he plays a stunning brand of contemporary jazz that puts music first—not commerciality. His remarkable seven-and-one-half-minute solo on Extremity is one of the bright beacons in mid-Seventies music.


Making the jump from ace studio musician to up-front star has been a popular procedure ever since Mitch Miller gave up the oboe and Leon Russell began recording his own songs. Guitarist Ritenour joins the parade in this sadly misguided outing. The simple fact is that the world really isn't sitting around waiting for yet another overarranged, overproduced, jazz/rock/disco recording. Having heard Ritenour in more modest surroundings, I know he can play—and play well. But his few pleasant moments here eventually fall prey to terminal L.A. slickness.


Unlike most young musicians who grow up in Dixieland surroundings, Vache is not guided by any style of the past. Although he comes out of the very active New Jersey traditional jazz scene, he is, first and foremost, a good trumpet player who is not tied to any identity except his own. On this debut disc he shows control and imagination on several unaccompanied duets with guitarist Bucky Pizzarelli. He also leads a sextet, with Kenny Davern on soprano sax, that swings through some pop standards and combines the best of traditional and contemporary jazz. The combination of these two streams and Vache's own polish and assurance make the disc unusually fresh and vital.


Pianist Mal Waldron's roots go back to Billie Holiday and Thelonious Monk, but he also has been active around the edges of every avant-garde jazz movement since the Fifties. His collaboration with Peacock (recorded in Japan) has too many stylistic confrontations to work as a totality. But when each player spins off in his own direction—Waldron into epigrammatic pointillism, Peacock into a duplicitous mix of Sixties funk and Seventies modernism—there are moments of rare beauty.


Considering the personnel changes in the World's Greatest in recent years and a series of records that were needlessly hackneyed, this is a welcome recovery for both the band and its approach to recording. Taped at a concert in Sweden, it has some of the ensemble's most viable musicians—Ralph Sutton, Billy Butterfield, Peanuts Hucko, Al Klink, and George Masso, in addition to cocraders Yank Lawson and Bob Haggart. As a bonus, Maxine Sullivan makes an appearance in appealingly cool-voiced form. But to wind up an otherwise fresh disc with The Saints suggests that the band is still apt to blight itself with triteness.
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You a Thousand Ways and I Want To Be with You Always, pleasant on their surface but disturbed by dark, desperate undertow.

Songs from Frizzell's autumn years, 1965–74, comprise the second side. She's Gone, Gone, Gone is a light rocker. Railroad Lady, written by Jimmy Buffett and Jerry Jeff Walker, is one of the finest latter-day train songs. I Never Go Around Mirrors was Lefty's last great record—astute, almost surreal, but at the same time a killer honky-tonk number. Willie Nelson is not the singer Lefty was, but he's done a lovely job here. And what a relief the album is from the gushings and cloyings of all that Outlaw nonsense.

Mirrors was Lefty's last great record: yesterday train songs. I Never Go Around Mirrors was Lefty's last great record—astute, almost surreal, but at the same time a killer honky-tonk number. Willie Nelson is not the singer Lefty was, but he's done a lovely job here. And what a relief the album is from the gushings and cloyings of all that Outlaw nonsense. N.T.


Newton-John's seventh album is, sadly, her most insipid yet. The novelty of her baby-doll vocalizing is evidently wearing thin on the public, as her noticeably decreasing sales demonstrate: Please Mr. Please was her last gold single, though she's released seven since and her albums are now only selling in the hundreds of thousands, rather than the millions. (I said she was selling less, not that there aren't still a lot of old softies out there!)

"Making a Good Thing Better" is also her first LP to be recorded in its entirety in Los Angeles. In addition to producer John Farrar, who's also played guitar on all of her previous work, Newton-John is surrounded largely by the same people who play on everybody else's L.A. recordings. Not that this one sounds like everybody else's; it sounds like every other Olivia Newton-John album. The shortcomings are in the vocal performance and in the material, not in the computer-perfect backing tracks.

In a sense, what Farrar has done is pretty noteworthy. He's chosen the most uninspired material of some of the finer, though lesser-known, songwriters around. Pete Wingfield (18 with a Bullet a couple of years back) wrote the title tune, and Jack Tempchin and Jules Shear of the Funky Kings, progressive country-type Marshall Chapman, and Randy Edelman some of the other cuts. The closest thing to a winner is Tempchin's Slow Dancing, which seems to all but put Newton-John to sleep.

Perhaps surprisingly, the more notable tunes are by Farrar and by the singer herself. His Cooling Down, about a love affair on the wilt, is at least suited to Newton-John's delivery, and her Don't Ask a Friend, is—at the very least—the equivalent of just about anything else on the album. Also, she seems more interested in this piece than in most of the rest.

Like its predecessors, "Making a Good Thing Better" is professionally produced and as tasteful as all get out. There's doubtless a good deal of enjoyment in its grooves for any solid fan. Newton-John no doubt has the talents, but this LP's chief fault is its failure to live up to its title.

Neil Young: American Stars 'n Bars.

This album might blow Neil Young's whole reputation—or at least a good part of it.

Young has, rather deservedly, come to be known as one of rock & roll's quirkiest musicians—due both to his reticence to go public and to the unevenness of his recording career. He'll release an album every year or so, and he has twice scrapped projects entirely at the last moment. The latest instance was a three-disc best-of compilation. "Decade," that was to include outtakes from earlier sessions with the Buffalo Springfield and Crosby, Stills, Nash & Young, and some of his own more obscure material (like Sugar Mountain, which has been released several times on the B side of various singles but never on an album). "Decade" got to the test-pressing stage—with some review copies even sent out—and was suddenly withdrawn. In its place is "American Stars 'n Bars."

Well, now, that's pretty quirky behavior, and it probably cost Young a couple of bucks in no-return expenses. And the new album has the look of a typical, rather spontaneous, Young project. There is material that's as much as three years old, together with some that was recorded just prior to release. Young's vocals, and some of the instrumental work, sound like first takes after a long night, some of the songs make no literal sense whatever, and the cover is a collage that could have been thrown together even more quickly than what's inside.

And, again characteristically, the result is as brilliant as it appears spontaneous; as genuine as most other albums are calculated.

What's atypical is the sheer accessibility of the material. Most of the songs on Side 1 are what would pass as country in most rock & roll circles—you can even hum the melodies although the singer himself frequently has trouble staying in tune, but that's part of his charm. Side 2 is even better, with two songs guaranteed to become Neil Young standards. Homegrown, which sounds like a planned sequel to Ronstadt's arrangement of his Love Is a Rose, and Like a Hurricane, an eight-minute guitar freak-out combining the best elements of C.S.N&Y's Southern Man and the Springfield's Bluebird. Wonderful.

For those committed to Young weirdness, there's still hope, manifested in the ballad Will to Love. It's a one-man show, and his vocals and instrumental drift in and out of what sounds like slamming doors, dropped shoes, and heaven only knows what else. But the song is quite pretty.

The playing throughout is professional, with guitarist Frank Sampedro a standout. To keep up with Young, he'd better be.

The other day, I heard an instrumental of his earlier Heart of Gold in a restaurant over a canned-music system. Could be the public's catching up with him. Somehow, I hope not. We need a few cult figures around to give us perspective.

Despite the departure of Ray Barretto (whom Mongo Santamaria replaces on congas), the All-Stars are just that: some of the best Latin players around. In their eagerness to popularize salsa, however, they often end up adulterating it. Though the percussion section cooks here, Jay Chattaway's arrangements keep the lid on with top-heavy brass, strings, and oohing aahing vocal choruses that are strictly from Muzak. The chili is good, but it's smothered in Velveeta.


Ian Hunter's last album suffered from the sterile sound that often results when good musicians who don't ordinarily play together meet for a one-shot studio session. He's got a real band on this record, which explodes with bashing, madcap energy and recalls Hunter's Mott the Hoople days. If it doesn't quite recapture them, it's only because most of the songs lack the autobiographical intensity of his most compelling work.


Barry Manilow's spectacular cast-of-dozens roadshow comes on like Up With People—packaged pep and synthetic sincerity. The hilarious medley of Manilow's commercials (for State Farm Insurance, Dr. Pepper, etc.) unwittingly points out their similarity to his later, equally commercial, songs. They all swell to the same inspirational choruses. And Manilow undermines the schlocky grandeur of his two hits, Could It Be Magic and Mandy, by collapsing them together.

The Steve Miller Band: Book of Dreams. Steve Miller, producer. Capitol SO 11630, $7.98. Tape: * 4X0 11630, $8X0 11640, $7.98.

If cleanliness is next to godliness, Steve Miller's on the side of the angels, for he's an immaculate guitarist. Heaven may frown, however, on one of his nastier habits: Evidently incapable of dreaming up riffs of his own, he steals them from others. This album rocks smoothly and unoriginally, with Miller's bland, distant vocals and liberally applied synthesizer creating a "lost in the ozone" effect reminiscent of his first record, made almost ten years ago.


It's hard to imagine an odder coupling than Helen Reddy with Kim Fowley, longtime L.A. rock scene-maker. The incongruity makes "Ear Candy" intriguing but uneven, at times quite grotesque. The Fifties doowop parodies and the elaborate special effects can be quite funny, yet Reddy, always a rather stiff and humorless singer, seems ill at ease. The mock-nasty Baby, I'm a Star is a joke that misfires, mostly because one suspects it's the way Reddy really feels.


Despite the fact that Jean Ritchie is in her mid-fifties, her wobbly Appalachian soprano still sounds girlish, especially on a traditional song. "None but One" fuses the old with the new: folk with electric instruments, venerable ballads with recent songs written by Ritchie. The arrangements are eclectic and often quite elaborate, but the earnest purity of Ritchie's vocals (accompanied by Janis Ian, Mary Travers, and Oscar Brand, among others) makes it all sound simple—and quite touching.

Cat Stevens: Izitso. Cat Stevens and Dave Kershbaum, producers. A&M SP 4702, $7.98. Tape: * CS 4702, $8T 4702, $7.98.

To call "Izitso" Cat Stevens's best album in five years is to damn it with faint praise. It deserves more than that. The songwriting is forceful and the rhythms rocking (Old Schoolyard is a potential hit single), the dense arrangements for a battery of keyboards and synthesizers consistently interesting, and the playfulness less puerile than in the past. Stevens will probably always sound naive, but this time around he's far from insipid.


On his new album, Jimmy Webb devotes a sad song. If You See Me Getting Smaller I'm Leaving, to his "borderline career." Ironically, it may be the best thing he's ever written. The same goes for all of "El Mirage," whose overwrought beauty is redeemed from banality by the drama and desperation of Webb's romanticism. Sumptuously orchestrated by George Martin, the record ravishes the soul. Does that sound like hyperbole? It's a hyperbolic album.
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ABBA: Arrival. A.P., 11 songs. $5.95.

Sweden has sent us Orrefors glassware, the Saab, and Liv Ullman. Now it's managed to undo all the good work with ABBA, a vocal quartet of cloned Carpenters. The group's orchestral background is grandiously electronic, either booming or shimmering, and the printed page cannot approximate even an iota of the recorded sound quality.

Although there is a certain quaint charm in their lightly accented singing, the intellectual level of ABBA's original material (except for Fernando, their first hit) could not challenge the sophistication of a Mouseketoe. Pass this one up — you'll grow out of it. Maybe they will, too.

Peter Frampton: Anthology. Big 3, 37 songs, $7.95.

For those who can't survive without a large fix of Frampton, the "Anthology" is a well-transcribed discography of thirty-seven self-penned songs culled from no less than eight individual LPs. In no case is any of these albums represented completely, but then Mr. Frampton's disc mentors are given to reissuing already-recorded material at will, in differently tailored record jackets. I also noted several lyrics at variance with the recorded performances.

Listening to Frampton is akin to taking methadone to relieve your Mick Jagger withdrawal pains; it's a great idea, but it doesn't always work.

The Homecoming and Other Great Piano Solos. Compiled by Jan Thomas. WBP, 27 songs, $4.95.

A modest delight: distinctive, but not difficult, piano transcriptions of pleasant material. Here you will find Rhapsody in Blue in the Deodato arrangement; a complete-with-fingering version of Scott Joplin's The Entertainer (arranged by Ada Richter); art-deco piano embodied in Eddy Duchin's styling of Lullaby of Broadway; a delicious '20s tea-dance tango, Jalousie, brilliantly adapted by Henry Levine; and all sorts of other collectibles, even Van McCoy's The Hustle. Satisfaction guaranteed, for the pro as well as the home pianist.

ZZ Top: Fandango! WBP, 12 songs, $5.95.

The paper on which these self-indulgent snippets are printed is of a coarse, inferior quality, making recycling for any purposes whatsoever an impossibility. Who is kidding who?
petitive publishers in their successful quest for literate, unshackled, arrangeable songs that will please the audience as well as the performer. The folio fills a great need and I urge you to add it to your library.

Big 3 has favored us with three big singers' volumes, two of which are for specialized tastes. "Top Country Hits of 1976" fudges slightly by including a few graybeards—Peace in the Valley (1939), Release Me (1954), and Sixteen Tons (1947)—but on the plus side offers many worthwhile mid-Seventies copyrights recently recorded by Linda Ronstadt, Cash McCall, Freddy Fender, Lynn Anderson, and other stalwarts of the genre. "Great Songs of the '40s" is an excellent compendium of nostalgic material from that currently hallowed era. Heads-up editing might have caught a few omissions in the pertinent information department: While most of the songs from movie musicals are credited as such. It Happened in Sun Valley and Our Love Affair are not. The first is, of course, from the film of the same name, and the second was sung by Judy Garland in Strike Up the Band.

Big 3's "Top Hits of 1976" is, with a few exceptions, essentially a low-budget regrouping of their own barely two-month-old folio. "The Best of the Superstars." The rationale behind this escapes me. Some explanation is also due for the mysterious contents listing of two "bonus songs." Neither one—Love Music, Part I, and Memories Are Made of This—is to be found anywhere in this collection and certainly not on the pages indicated, unless printed in invisible ink. A rather kinky editorial choice, which I sincerely hope is not the start of a trend. In the inclusion of the McDonald's commercial. You. You're the One. No comment.

Trailing the pack is good old Warner Bros. ("Evergreen and Other Great Love Songs"), which as usual insists upon overkilling us softly with their songs that have been re-re-re-printed in each successive WB folio ad nauseam. Perhaps a case can be made for the repeated inclusion of some of these well-worn classics, such as Summer of '42 and How Can You Mend a Broken Heart of Gold; but the Beatles' Long and Winding Road, Cole Porter's Night and Day, Sedaka's Laughin' in the Rain, and Lightfoot's If You Could Read My Mind are still very much purchasable in other steady-selling WB composer collections and should be immediately retired from active duty on the omnium gatherum circuit.

ELISE BRETON

AP—Almo Publications
Big 3—Big 3 Publications
CMC—Chappell Music Corp.
WBP—Warner Bros. Publications

SEPTMBER 1977
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*Figure: Diagram of the Elcaset tape mechanism.*
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