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ment. But it also represents the kind of thinking and value you get in every high fidelity component we make. That's why besides everything else, the SX1980 features a suggested price of less than \$1250\*\* Which only sounds expensive until you hear what our competition is asking for other high powered receivers that lack this kind of sophistication.

The SX1980 is currently inspiring awe at your local Pioneer dealer. But before you go listen be forewarned: it'll spoil you for any-



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#### The Music -

#### MARVIN HAMLISCH PUNK ROCK BEST RECORDINGS OF THE MONTH Opera: Puccini's "Girl of the Golden West". . . . Instrumental: Vivaldi's "Seasons" and other concertos. . . . Jazz-Rock: Little River Band's "Sleeper Catcher". . . Jazz: Egberto Gismonti's "Sol Do Meio Dia". . . Chamber Music: Schubert's POPULAR DISCS AND TAPES ......106 Hodges, James & Smith......Phyl Garland ......107 CLASSICAL DISCS AND TAPES ......148 Two Striking New Works by Corigliano 149 Pettersson's "Vox Humana" Song Cycle David Hall 152



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COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. See page 90.

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IMPROVED DISC QUALITY may turn out to be one of the benefits of a whole new generation of record-cutting lathes from such companies as Neumann and Cybersonics. Because of its compactness, the Cybersonics unit is of special interest to direct-to-disc producers, who feed several cutting lathes simultaneously. Neumann's innovative VMS 80 includes a combined microscope and video camera to display the groove on a TV monitor <u>during cutting</u>. The virtual elimination of rumble is claimed for the Neumann lathe, which applies new technology originally developed for video-disc mastering.

> • CONDUCTOR CARLO MARIA GIULINI will make his inaugural appearances as music director of the Los Angeles Philharmonic on October 26, 27, and 28, leading the orchestra in Beethoven's Ninth Symphony. A repeat performance on Sunday, October 29, at 1:30 (PST) will be telecast live by satellite throughout the United States and part of Europe. Check local listings. By that time Zubin Mehta, Giulini's predecessor in L.A., will have taken over as music director of the New York Philharmonic, making <u>his</u> TV debut in his new job on September 20 in the Live from Lincoln Center series sponsored by Exxon on the Public Broadcasting Service.

• CIGAR-BOX-SIZE "MINI" AUDIO COMPONENTS, lately all the rage in Japan, will shortly begin to turn up in the U.S. as well. In addition to Mitsubishi, whose "microcomponents" made their first public appearances at the summer trade shows, Pioneer, Yamaha, and Sanyo are all reported to be working on "compact" lines. And of course Philips is preparing to drop its 4 1/3-inch-diameter "super-fi" digital minidisc on the market any day now. Must be a trend.

• WILLIE NELSON'S NEW "STARDUST" ALBUM (Columbia JC 35305), a collection of country reinterpretations of standard hits from the Twenties, Thirties, and Forties, has put such composers as Irving Berlin, Hoagy Carmichael, Duke Ellington, and Kurt Weill back on the charts. Revivals of this kind are also quite common in the disco field, where such old songs as <u>Baby Face</u> (1926) and <u>Tangerine</u> (1942) were early-Seventies hits. According to ASCAP spokesman Walter Wager, such revivals do more for composers and lyricists than increase their royalties. "A songwriter works not only for money," he says, "but also for approval, and it's terrific to have the approval of another generation."

 A NEW ELECTRONICALLY CONTROLLED TONE ARM by Sony uses servos instead of counterweights and springs to apply tracking force and antiskating. Feedback from motion-sensing devices permits compensation for arm-cartridge resonances and record warp. Production is scheduled to begin this fall; the arm will be sold, with turntable, for something over \$700.

> ● ROSSINI'S <u>THE TURK IN ITALY</u> will be telecast in Exxon's Live from Lincoln Center series by the Public Broadcasting Service on October 4. The new English-language production by the New York City Opera Company will feature Beverly Sills, Susanne Marsee, Henry Price, Alan Titus, Donald Gramm, and James Billings. Julius Rudel conducts.

## Stereo Review BOLLETIN

• FLAT-PANEL TELEVISION has recently moved a few more inches toward reality. The display panel ("picture tube," if you will) on the 14½ x 7½-inch set shown by Sharp at the summer CES is only 2 inches thick. Sanyo's prototype "LED Panelvision" is said to have a picture as bright as that of conventional black-and-white TV--thanks to 6,144 light-emitting diodes. And Japan's NHK has developed an experimental 16-inch gas-discharge <u>color</u> panel that is probably the world's largest.

> • AUDIO DISC RECORDINGS AND VIDEOCASSETTES are being marketed together for the first time by Improvising Artists Records, a progressive jazz label. The albums are Sun Ra's "St. Louis Blues," Marion Brown and Gunter Hampel's "Reeds 'n' Vibes," Perry Robinson's "Kundalini," and a concert at the Great American Music Hall in San Francisco that includes Paul Bley, Bill Connors, Jimmy Giuffre, and Lee Konitz. The video presentations vary. Some are straight documentaries of the musicians performing, but others combine abstract interpretations of the music made with video synthesizers. All can be ordered from Improvising Artists Records, 26 Jane Street, New York, N.Y. 10014. Price: for disc and videocassette, \$39.95; disc alone, \$7.98.

◎ AMPEX GOLDEN REEL AWARD GOES TO BLUE OYSTER CULT: Whenever a record completely mastered and mixed on Ampex professional tape is certified gold or platinum by the RIAA, Ampex presents a plaque to the artists and \$1,000 to the charity of their choice. When the Cult, noted for loudness, received an award for "Spectres," they asked that the donation go to the New York Society for the Deaf.

SOPRANO CAROL NEBLETT, who sings the title role in Deutsche Grammophon's new recording of Puccini's <u>The Girl of the Golden</u> <u>West</u>, is the first American to record the role of Minnie. Her co-stars include the American baritone Sherrill Milnes as the sheriff Jack Rance and the Spanish-Mexican tenor Placido Domingo as the bandit Ramerrez (also known as Dick Johnson). See Best of the Month for review.

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## **Editorially Speaking**



#### **IBERIAN SIBYL, HIBERNIAN PAN**

HE wondrous mystery we call language is at once mankind's most distinguishing feature and our most glorious accomplishment. More wondrous still, in addition to a plenitude of verbal languages living and dead, we have the miracle of a musical one as well. What we do not have is a dictionary to permit us to translate from one type into the other, and the reason is very likely the one given by Mendelssohn: it is not that music's meaning is too vague or amorphous to be explicated verbally, but just the other way around-words are too coarse, too ambiguous to deal with music's great precision. And that is why music criticism is largely an exercise in picking flowers with a bulldozer. The solution is obvious: since we all understand music (have you ever met anyone who claimed not to?), we must all learn to speak it (sing it?) too if we really want to particularize our reactions to it adequately. In the meantime, verbal imprecision is the best I can offer as I try to share with you the delight of a couple of this summer's musical experiences.

A welcome new performer at Lincoln Center's twelfth annual Mostly Mozart Festival was the Belfast-born flutist James Galway. He appeared in an all-Schubert program with pianist Christoph Eschenbach, and he turned out to be not only the superb virtuoso his recordings have led us to expect, but the kind of lovable, unabashed show-off to make the heart of Phineas Taylor Barnum swell. He plays a gold flute and knows exactly how it should sound: a provocative blend of the earthy and the unearthly, seductive and a little hair-raising at the same time.

The popularity of the flute just now is something of a phenomenon of our musical life: there seems to be almost a cascade of flute recordings pouring out and more young flutists around than you can shake a stick at.

Perhaps it is merely that the instrument is so portable-more so even than the guitar-or perhaps it is because, like the guitar, it lends itself so quickly and easily to amateur musicmaking (the step up to the professional level is another set of scales entirely, of course). Galway's explanation, offered with a leprechaunish mock-gravity, is more direct: "Why, it's the instrument of love-just look at it!" It is also an instrument that arouses in me-at least in Galway's playing-an unusual motor sympathy: a wind instrument takes breath, breathing makes the best kind of musical phrasing-and there I am breathing and phrasing right along with the performer.

Perhaps the most popular of the Mostly Mozart regulars has been the Spanish pianist Alicia de Larrocha (it has been waggishly suggested that the Festival be rechristened Mostly Alicia in her honor). Her August program this year consisted of a Bach French Suite, three Mozart sonatas-and a breathtaking surprise: a performance of the A Minor Sonata No. 8 (K.310) that was the most stunning Mozart I have ever heard. She herself characterizes the sonata as the finest Mozart ever wrote (coincidentally, in the summer of 1778)—perhaps the finest anyone ever wrote. She was playing it in public for the first timeplaying it as if it were Beethoven, in a manner that quite simply predicts Beethoven.

The first-movement Allegro was in the imperative mood, a peremptory summons to important matters right from the first grace note, the Andante anguished and moving, the Presto not hurried or smudged, but measured, grandly inexorable, and chillingly final. It was one of those once-in-a-lifetime events, a communication in the musical language that brought the audience to its feet with a roar.

Flutist Galway's latest recording is "The Magic Flute of James Galway" (RCA LRL1-5131), and an all-Bach album is imminent; pianist De Larrocha's is "Mostly Mozart, Volume Three'' (London CS 7085), but let us hope we haven't too long to wait for that K. 310 sonata.

**Stereo Review** 

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#### **Rolling Stones**

• STEREO REVIEW should give a copy of the Patti Smith quote on page 80 of the August issue ("Very few critics understand what we're doing . . .") to Lester Bangs, since his unbelievably ridiculous review of the Rolling Stones' "Some Girls" in the same issue definitely proves her point. I think it would be very interesting to see what Steve Simels has to say about the Stones' best album in years.

> VICKI FISHER Tustin, Calif.

I usually file record reviews under "M," for meaningless, but Lester Bangs' repulsive once-over on the Rolling Stones' "Some Girls" has set my poison-typing keys into motion. To declare an entire album "contemptuous" and to offer such weak evidence for it casts Mr. Bangs as the William Safire of the review set. First off, how in Keef's name does he know what the Stones actually think of women? Has he probed the inner workings of their minds, or, perchance, has the late Brian Jones communicated from the nether lands with this paragon of virtue, Sir Lester? Second, his complete put-down of the title track shows that Mr. Bangs' sense of humor lies somewhere between that of a rock and a doorknob. To take the lyrics so literally is plain foolhardy. Next, apparently his mind was away on vacation when he listened to Shattered, for it is not about a male hustler, as Mr. Bangs surmises, but the sad plight of New York City, as anyone who listens to the lyrics can attest.

If Mr. Bangs considers the Stones to be near death's door, I suggest that he check the latest sales charts and mull over the crowds attending their U.S. concerts. If Messrs. Jagger, Richard, Watts, Wood, and Wyman are indeed nearing the end, Les baby, then you and I and the rest of this planet should be so lucky in *our* professional dotage.

> ANTHONY J. KIELBASA Mahanoy City, Pa.

• I was totally outraged at Lester Bangs' review of the new Stones' LP, "Some Girls." Contrary to Mr. Bangs' opinion, the Stones do not follow the trends of the day, they start them. In many instances this group has

changed the way people listen to rock music, as with Satisfaction, Tumblin' Dice, Brown Sugar—the list goes on and on. "Some Girls" is no exception. It would be nice if, some day, album reviewers could actually see beyond their upturned noses and judge a band for what it actually is. For sixteen years the Rolling Stones have represented evil, Satan, and decadence. This was always their mark of greatness. Is Bangs annoyed because they have stuck to it? Unlike many other rock groups, the Stones promise decadence and deliver it, in its top form. The group never claimed to be mama's boys, and they certainly aren't.

Mr. Bangs terms the title cut of the album "perhaps the most disgusting song of all in its attitude toward women—or perhaps toward other humans in general." Could it not be, instead, an honest put-down of racial biases? Yes, it most probably is. Do the falsettos on *Beast of Burden* actually sound like the Bee Gees? No, they most certainly do not. But I'm sure Mr. Bangs has worn out so many copies of the *Saturday Night Fever* soundtrack that everything non-Gibb sounds bland to him.

The Stones *are* Rock 'n' Roll and "Some Girls" is a damn good LP, possibly the best released this year.

GORMAN BECHARD Waterbury, Conn.

• Lester Bangs' review of the Rolling Stones' "Some Girls" precisely articulated my own feeling of disgust for the record. Moreover, Mr. Bangs' writings over the past years in STEREO REVIEW and elsewhere have caused me to respect him more than any other current rock critic.

Thank you, Mr. Bangs, for consistently writing with conviction, intelligence, honesty, and, above all, *integrity*! If we ever meet, I will feel honored to buy you a beer, milk shake, tomato juice, or any other drink of your choice.

> RICHARD K. JOP Hastings, N.Y.

• Regarding the August review of the Rolling Stones album "Some Girls": Who the hell is Lester Bangs? With such writers as Steve Simels, Peter Reilly, Noel Coppage, Joel Vance, Chris Albertson, Phyl Garland, and Paul Kresh, who needs him?

DEAN L. LAMNECK Mansfield, Ohio

• In the August issue, the Joel Vance review of Foghat was right off, but his review of the Isleys was right on, and the Lester Bangs review of the Rolling Stones was great, really great. Now, if someone would just tell McCartney that it is 1978 and he can't coast on cuteness any more (he makes Olivia Fig Newton look *heavy*).

> Ron Koch Garland, Texas

#### **Exotic Speakers**

• I enjoyed, very much. Peter W. Mitchell's "Exotic Loudspeakers I Have Known" in the August issue. I encourage you to feature more such articles (not limited to speakers). But, as an owner/admirer of one of the exotic speakers shown, I noticed some errors on page 73 in the caption for the picture heading the article: the speakers shown are Magnepan's smaller Model MG-IIa (6 feet x 22 inches), not the Tympani ID; both the MG-IIa and the Tympani ID are planar-magnetic, not electrostatic; each Tympani ID folding screen is comprised of three 16-inch-wide panels, so that the unfolded width of the Tympani ID is 4 feet, not 3 feet. Incidentally, the MG-IIa speaker that was shown may be exotic, but its price isn'tit lists for \$825 a pair. And no, I am not a Magnepan dealer. I wish I were.

> JOHN A. MITCHELL Norman, Okla.

Mr. Mitchell (John A., who, as far as we know, is no relation to Peter W.) is correct on all counts. We regret the errors (ours, by the way), but we are gratified by the number of readers who discovered them—apparently a lot of you read even the smallest type—and went to the trouble of letting us know.

#### **Disco Prescription**

• I am prompted to write by the musical/ medical question, "Does Disco Cause Cancer?," posed in August's "Editorially Speaking." I have done no research on that specific disease, but I do have definite symptomatic evidence that disco music causes hemorrhoids. I have no professional confirmation of this, but the location of the pain makes the conclusion inescapable.

> ED HEATH Lexington, Ind.

The Editor prescribes a little light exercise such as, say, dancing—to work the pain out.

#### Dohnányi

• Heartfelt thanks to Eric Salzman for his August review of the Quintessence release of Earl Wild's Dohnányi. Now that both Julius Katchen versions of the Variations on a Nursery Tune are unforgivably deleted, Wild's performance assumes first place. Dohnányi's own renditions, conducted (in chronological order) by Collingwood and Boult, are witty and musical but leave much to be desired in (Continued on page 14)

## "State-of-the-art Fever."

#### The peculiar disease that has made Infinity what it is today. (And what it will be tomorrow.)

It's chronic and incurable — our need to reach for state-of-the-art perfection; our obsession with absolute accuracy of musical reproduction.

Certainly Infinity isn't the first speaker company to create exotic technology. But when you look around and start counting, you'll discover that we're the *only* major American speaker company involved with state-of-the-art technology – year in and year out. Chronic.

### It's people like you who spread the disease.

Of course, speakers speak, and more than one Infinity speaker has sold itself. But the Infinity success story is due in no small part to knowledgeable audiophiles and music lovers – people like you – who, having heard Infinity speakers, spread the word.

In fact, the widest dispersion in stereo is the sound of friends telling friends about Infinity speakers.

And we thank you.

#### Our object all sublime.

First, we'll continue to develop the most advanced speaker technology in the world. Second, we'll continue to put as much as possible of that technology into speakers at *all* prices.

#### A case in point: EMIT<sup>™</sup>

We believe our Electromagnetic Induction Tweeter to be the most advanced tweeter in the world of audio.

An etched "voice coil" on an extremely low-mass diaphragm is driven by magnets of rare-earth Samarium Cobalt — the most powerful magnetic substance known. The resulting output shares an electrostatic's delicacy of sound. But is better than electrostatics, cones and dome tweeters in power-handling capacity, transient response and horizontal dispersion.

Every speaker in the Infinity Quantum and Q lines — all the way down to our \$109\* bookshelf Qe has one or more EMITs. Which is one reason they also have a clarity, a transparency and a smoothness of response superior to that of any other speaker in each price range.

#### The formidable QRS and the more modest Quantum 5

To the rare listener who needs to consider neither speaker size nor price, our Quantum **Reference Standard** - at \$6500\* for the complete speakers-andequalization system - offers tremendous energy handling capacity, accuracy of response, and a seldom heard warmth and reality.

Quantum 5 – at \$355 each – utilizes much of the same unique Infinity technology on a smaller scale, and still produces a level of accuracy that would be a revelation from speakers of any size.

#### No one ever wrote a hit musical called "The Sound of Speakers".

We're convinced that, in the long run, speaker buyers will prefer to hear *music the way the musicians intended it*, and not the way a

speaker designer intended it. Thus our continuing obsession with accuracy.

We're making progress. Five years ago only hard-core audiophiles ever heard of Infinity. Today

we're one of the three largest speaker companies in America. But we're not discouraged. We'll keep on trying.

We get you back to what it's all about. Music.

\*Manufacturer's suggested retail price, optional with dealers. West of the Mississippi, the suggested price for a Qe is \$105; for a Quantum 5, \$340. Speaker Stand optional. © 1978, Infinity Systems, Inc., 7930 Deering Avenue, Canoga Park, California 91304. (213) 8#3-4800 • TWX 910-494-4919. For information, call toll-free (800) 423-5244 (In California; (800) 382-3372). terms of pianistic finesse. However, it is Mr. Salzman's classification of Dohnányi as "a brilliantly accomplished composer" that warms the cockles of this Dohnányi fanatic's heart. The neglect of his charming, melodic music has been puzzling me for a number of years now. To paraphrase Will Rogers: I never met a Dohnányi work I didn't like!

ALEX HASSAN Falls Church, Va.

#### Which Boris?

The "mysterious edition" of Act II of Boris Godounov that was used for the Boris Shtokolov recital disc reviewed by George

#### Jellinek in August is actually the Dmitri Shostakovich version, which is rarely done in the U.S. If my memory serves me correctly, there was an abridged recording of a Metropolitan Opera production of it conducted by Dimitri Mitropoulos that was privately issued in the Fifties.

Howard Wayne Brooklyn, N.Y.

#### Stanley Clarke

Chris Albertson laid an asteroid in his August review of Stanley Clarke's "Modern Man." Being bored during Rock & Roll Jelly implies dead batteries in one's hearing aid, in-



tape recorder's playback head can erase critical high frequencies and create tape hiss. Our Head Demagnetizer protects your tapes by safely removing magnetic buildup.

Designed for reel-to-reel, cassette and 8-track units, the Nortronics Demagnetizer has a flexible, vinyl-covered probe which prevents scratching or scoring of sensitive head surfaces. Look for it, along with your free copy of our 36-page Recorder Care Manual, in your audio dealer's showroom.



Recorder Care Division

8101 Tenth Ave. North, Minneapolis, Minn. 55427 We make things right. cipient coma, or terminal numbness of the viscera. I wish Mr. Albertson a speedy recovery from whatever ails him.

ROBERT A. HICKS Plantation, Fla.

#### **Disc Quality**

In its continuing quest for quality, Desmar Records is now pressing most of its product in Europe. Effective immediately, the American pressing of the Rachmaninoff Symphony No. 3 with Leopold Stokowski conducting the National Philharmonic Orchestra (DSM 1007) is being replaced by a German pressing (DSM 1007G). As a special service to those who already own the American pressing, Desmar will exchange it for the new German one at a nominal charge of \$3.50 postpaid. Please send the record only (without the jacket) to Desmar Music, Inc., 155 Avenue of the Americas, New York, N.Y. 10013. This exchange offer is available through the mails only, and requests must be postmarked no later than November 1, 1978.

> MARCOS KLORMAN President, Desmar Music, Inc. New York, N.Y.

Enough already! It has all been said and done. The inescapable conclusion is that the U.S. of A., which has the technology to put a man on the moon, is simply incapable of producing a quiet record. Orion has been trying to achieve this for twenty years, yet current pressing quality is still a tolerable compromise at best. Since we issue an average of a record a week, it is not feasible for us to use European pressing facilities.

The answer? Tape! Open reel is best, naturally, but cassettes are a reasonable alternative, the only sensible way to go at present. We are very enthusiastic about the excellent quality we've been able to achieve in our first release. The definition, fidelity, and clarity of the music, even on a car cassette player, serve as a vivid reminder that there is still no beating electronic reproduction. Our second release of twenty cassettes (the equivalent of some thirty-five LP's) is now on its way to distributors. We plan eventually to have the greater part of our catalog (now more than 300 LP's) available on tape.

GIVEON CORNFIELD President, Orion Master Recordings, Inc. Malibu, Calif.

#### Charlie III

In his review of Charlie's "Lines" in the August issue, Joel Vance makes the all-toocommon mistake of calling it the group's second album. It is actually their third album; the relatively obscure first one, "Fantasy Girls" (Columbia PC 34081), is still available and should not be overlooked.

> JOHN W. HIGLEY Iselin, N.J.

#### "Decadent" Debussy

Eric Salzman's comments, in an August review, on the supposedly "morbid" and "decadent" music that Debussy wrote for Le Martyre de Saint Sébastien afford me the oc-(Continued on page 16) Most car speakers that are advertised as "true high-ficelity for your car" sound about as convincing as a usedcar salesman's pitch. More often than not, the music comes out sounding as if it were recorded in a closet full of winter clothes. The truth of the matter is that if a manufacturer wants to make car loudspeakers sound as good as the ones you hear in your home, he has to make car loudspeakers as good as the ones you hear in your home. Which means no tricks. No short cuts. No nonsense. Which is why the new KLH Model 693 DMSC automotive stereo loudspeakers sound about as good as anything you've ever heard anywhere. Maybe better. Consider the components. We use Controlled Acoustic Compliance\* Woofers with 30-ounce magnets for extended bass response. Hemispherical soft dome midrange drivers (found in only the most expensive speakers). And the most advanced driver found in any loudspeaker system – The Samarium Cobalt Tweeter (an ultra thin Kapton\* diaphragm with "printed" voice coil suspended between the most powerful magnet material known to man - rare earth Samarium Cobalt!). The 693 DMSC can be driven nicely by the stereo electronics in most cars. (You won't believe the performance if you decide to add a quality power booster.) Now instead of hearing a muffled mess from the back of your car, you can look forward to

hearing every nuance of the music — the timbre of the tympany, the bite of the brass, and the sweet, mellow

#### **The Samarium Cobalt Tweeter**



sound of the strings. And when all is said and done, isn't *that* what high fidelity is all about?

For more information on KLH automotive loudspeakers (we also make two-way systems, additional three-way systems, and a totally new concept in automotive sound, The Headliner series), write to KLH Research & Development Corp., University Avenue., Westwood, Mass. 02090.



University Avenue Westwood, Mass. 02090

You've never seen this name on an automotive loudspeaker because there's never been an automotive loudspeaker worthy of this name.





casion to commend STEREO REVIEW on its policy of allowing critics to express their opinions freely in print, no matter how inane and irrelevant they may be. Let me also commend Mr. Salzman for condescending to review music he despises, rather than relinquishing the assignment to one of the thousands of critics who, for the better part of a century, have considered that work to be among the composer's finest.

SCOTT HEUMANN Houston, Texas

#### Silent Grooves

Enjoying a Judy Collins album the other day. I was delighted to find that when the side ended the stylus didn't immediately run out of the end groove and go cur-chunk, thunking against the label. The disc had about ten seconds of unmodulated groove that silently "played" before the inevitable end. It was lovely. Attention record manufacturers!

Also, why is it necessary always to have exactly five seconds of "dead air" between movements of a recorded classical work? When I go to concerts, the maestro may take a three-second pause between, say, the scherzo and the finale, or he may wait twenty seconds or so, depending on the nature of the music to follow.

> BRUCE THOMSON Indio, Calif.

The length of the "silent groove" (between, say, the movements of a symphony) is not only

an aesthetic decision (it must not be too short or too long) but also a practical one. In classical music particularly, it is often important to crowd as much recording time as possible onto a single disc. Then, too, in the concert hall it is possible to take considerably longer because the musicians are there in front of you—you know that they have not gone home. Too long a time between movements in a recording, however, might give you the idea that your audio system has gone on the fritz.

#### **Neglected Singers**

While considering Teresa Berganza's recent recording of zarzuela arias (July), George Jellinek points out that "Berganza's long absences from our turntables should make us all feel aesthetically deprived." In fact. Berganza has been almost totally ignored by the recording industry and would be a most noble Orfeo, a brilliant Adalgisa, and a charming Cherubino! Other great artistssuch as Mirella Freni, Kiri Te Kanawa, Carlo Bergonzi, and Alfredo Kraus-are equally neglected while, instead, we are inundated ad nauseam by recordings with Sills, Caballé, Domingo, and Pavarotti. Should Caballé "attempt" everything from Lucia to Turandot? Should Domingo record two complete versions of Il Tabarro and Carmen? I think not, if as a result we are denied Freni's Manon Lescaut, Te Kanawa's Desdemona, Bergonzi's Otello, and Kraus' Werther.

Thomas R. Wilson Downers Grove, Ill.

#### Direct-to-disc

• Those who have invested thousands of dollars in stereo hardware have done so, I assume, for the resulting better sound reproduction that megadollars can buy. Quality is never cheap. Messrs. Balgalvis and Hodges, in their survey of direct-to-disc recordings in the July issue, were not concerned about "... the higher cost (roughly \$10 to \$20 per disc). . . . ' True advancement involves improvement of quality while taking a step toward simplicity within relative cost categories. D-D recordings simplify the recording process by eliminating certain steps, producing higher-quality discs but at a large price increase. D-D records are a joy to all music lovers but do not yet qualify as a significant advancement in the recording field. Simply, more money can buy a better product. Advancement worth a standing ovation comes when the same money buys a better product.

> JEREMY LEVINE Silver Spring, Md.

#### Video Software

Thanks for the piece on home videocassettes in July, and especially for the part on video software. I have been looking for a list of prerecorded-videotape vendors since I bought my VCR. I would like to see much more on the subject in STEREO REVIEW.

> SCOTT NEWKIRK Sacramento, Calif.

### YOU SHOULD EXPECT MORE FROM THE PHASE 4000 SERIES TWO.

Even if you're made out of money, you'd be hard pressed to buy more preamp.

The Phase 4000 Series Two goes way beyond the boundaries of conventional preamps. First, the 4000 processes and amplifies your music without introducing any significant noise or distortion. Then it actually compensates for losses in dynamic range and signal-to-noise ratios that occurred way back in the recording process!

To prevent overloads, studios "peak limit" the high-level attacks common in today's music. The 4000 Series Two has highly advanced circuits to read peak limiting, and immediately restore the dynamic range. The combined overall dynamic range is increased by 17.5dB. So when Charlie Watts hits a cymbal, it sounds like a cymbal! The 4000 Series Two also spots low level gain riding, where the recorcing engineer adds volume to a low signal to overcome noise on the master tape. The Downward Expander immediately expands the dynamics so you hear the bass as the conductor called for it, not as the engineer delivered it. The 4C00 Series Two second

The 4C00 Series Two second generation Autocorrelator reduces record hiss, tape hiss, and FM broadcast noise. Weighted overal noise

Par Simo

reduction is -10dB from 20Hz to 20kHz. So your music comes c ean, and the background is silent.

The 4000 has two new RIAA phono stages which eliminate low level switching and reduce hum and CB interference to a minimum.

Tape monitor and dubbing circuits allow copying between decks, while listening to a th rd program source. There's a separate direct coupled (OCL) Headphone Amplifier. An infra-

sonic filter eliminates audible effects caused by rumble. We could go on forever, but you get the point. The Phase 4000 Series Two.

It's waiting for you at your Phase dealer.

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Kings, 17 mg. 'tar", 1 .4 mg. nicotine, Longs, 18 mg. "tar", 1 .3 mg. nicotne av. per cigarette, FTC Report May '78.

## **New Product/** latest audio equipment and accessories

#### MXR's Multi-band Equalizers

□ MXR Innovations has announced the "Stereo Fifteen-Band Equalizer," which permits a 12-dB boost or cut at fifteen different frequencies spaced at alternate one-thirdoctave centers from 25 to 16,000 Hz. The unit has front-panel bypass and tape-monitor switches and level controls. Input impedance is 20,000 ohms and output impedance approximately 100 ohms. Total harmonic distortion is less than 0.02 per cent at 0 dB (20 to 20,000 Hz) with intermodulation distortion of less than 0.01 per cent. The noise level is better than -92 dB over the audio band, and frequency response is down 3 dB at 5 and 60,000 Hz. Dimensions are  $19 \times 3\frac{1}{2} \times 6$  inches: weight is approximately 41/2 pounds. Price: \$325.

A single-channel, one-third-octave equalizer (thirty-one bands) with essentially the same specifications is available for \$350.

Circle 115 on reader service card



□ The new JVC "Vidstar" HR-3600 has been announced as the first  $\frac{1}{2}$ -inch video-cassette recorder with variable-speed playback controls. In addition to normal playback, the unit permits stop-action, slow-motion, and double-speed playback. The HR-3600 also features remote controls for normal, pause, still-frame, and double-speed operations. Other features are identical to those of the original Vidstar recorder. The HR-3600 measures about 18 x 6 x 12½ inches and weighs 31 pounds. Price: \$1,335.

The HR-4100 recorder and GC-3350 color

camera (shown) constitute the first portable VHS system. The HR-4100 AU has record/ play functions similar to the a.c.-powered members of the JVC family and a battery-level indicator. It comes with a Model PBP-1 battery that can be recharged overnight with the Model AA-P41 a.c.-adapter/battery charger, which can handle two batteries at once. The HR-4100 measures approximately  $13\% \times 51\% \times$ 13 inches and weighs 201% pounds with battery. Price: \$1,180.

The GC-3350 color camera comes with an optional f1.8, 6:1 zoom lens, electronic viewfinder with aperture indicator, LED recording-mode indicator, playback picture monitoring, battery-power warning, and builtin condenser microphone. When used with the HR-4100 recorder the camera draws power from the deck's battery pack; with the optional GA-20 converter it operates on a.c. The GC-3350 measures about  $3\frac{1}{2} \times 12\frac{1}{4} \times 14\frac{1}{2}$ inches and weighs 7.3 pounds with lens and cable. The associated color-control unit (CCU), which mounts on the side of the deck, measures approximately  $4\frac{3}{4} \times 2\frac{3}{4} \times 11\frac{3}{4}$ inches and weighs 2.6 pounds. Price: \$1,475.

Circle 116 on reader service card



announced the Model 2501 FM tuner. This is a factory-built unit featuring a varactor front end with six tuned stages and phase-lockedloop multiplex circuitry fed by a double-tuned quadrature detector. The 2501 incorporates a digital quartz clock that changes from time indication to station readout when the tuning knob is touched. At the same time, a Dynatune circuit is activated that tunes and locks in the desired station. A LED signal-strength indicator has a 60-dB range in 10-dB steps. There are four station presets on the front panel, along with selectable de-emphasis of 25, 50, or 75 microseconds. Mono sensitivity is 1.7 microvolts and 50-dB quieting sensitivity is 3.5 µV. Selectivity is 80 dB, capture ratio is 1.75 dB, and image rejection is 100 dB. Stereo separation is 45 dB from 100 to 5,000 Hz and 30 dB at 10,000 Hz. In stereo, total harmonic distortion at 1,000 Hz is 0.25 per cent. The Model 2500 tuner measures 9 x 31/2 x 141/2 inches and weighs 13 pounds. Price: approximately \$800.

Circle 117 on reader service card



Delivers 125 Watts

□ The latest from Metron (a division of Cerwin-Vega) is the M-200 power amplifier, rated at 125 watts rms at no more than 0.02 per cent total harmonic distortion into 8 ohms from 20 to 20,000 Hz. With 4-ohm loads, 240 watts is available. The slewing rate is 70 volts per microsecond. There are two protection systems built in, one for the amplifier itself and the other for associated speaker systems. A rackmounting configuration with handles is standard. Intermodulation distortion is 0.02 per cent from 250 milliwatts to rated output, and frequency response is +0, -3 dB from 2.5 to 200,000 Hz, +0, -1 dB from 5 to 100,000 Hz. Signal-to-noise ratio is greater than 105 dB, and input sensitivity is 1.4 volts. The unit weighs 31 pounds and measures approximately 19 x 13 x 6 inches. Price: \$550.

Circle 118 on reader service card



□ In addition to a supply of specially formulated tape-head cleaner and replaceable felt applicator tabs, the Maxell Tape Recorder Care Kit includes a variety of specially shaped plastic tools that can be plugged into each other to reach tape heads that might on some machines be otherwise inaccessible. Also supplied is a special mirror to facilitate inspection and cleaning of awkward locations. Price: \$8.95.

Circle 119 on reader service card



What TDK did for your ears, it now does for your eyes.

**PER** 

You know us best for our reputation in audio. In fact, it's audiophiles like you who have made TDK SA the best-selling High bias cassette in America today. But here's something you may not know: the same Super Avilyn engineering principle that revolutionized audio cassettes is in TDK's equally revolutionary new Super Avilyn video cassettes.

No wonder that TDK Super Avilyn is the first 4-hour capability video cassette to be quality approved by the people who know: video cassette

> recorder engineers. And even less wonder that Super Avilyn makes possible an image so stunning, you will feel as though you are sitting in the broadcast studio.

> > What's more, TDK's strict quality control works to give you low wear on delicate video heads, virtually non-existent oxide shedding, and no problems with tape stretching, even with repeated playback.

> > That's because TDK Super Avilyn video cassettes are an actual component of the system, not just an accessory. Our tape is housed in a precision, jam-resistant mechanism, for years of consistent high quality video reproduction. And TDK Super Avilyn VHS video cassettes are compatible with all VHS machines, both those with short-play (2-hour) capability and those with short ard long-play (4-hour) options.

TDK Super Avilyn VHS video cassettes: model VA-T60, for one and two-hour recording; model VA-T120, for two and four hour recording. If you like things to look as good as you like them to sound, take a look.

TDK Electronics Corp., Garden City, NY 11530. In Canada: Superior Electronics Ind., Ltd.



The Machine for your Machine. CIRCLE NO. 76 ON READER SERVICE CARD



## **New Products** latest audio equipment and accessories



□ Readings of a variety of stories are now available in cassette form from Audio Literature. Material ranges from children's stories by Hans Christian Andersen to Conan Doyle's Sherlock Holmes stories. Prices are from \$3.95 to \$12.95, depending on length. A catalog listing titles, recording lengths, and prices is available from Audio Literature, Dept. SR, 1695 Carlin Street, Reno, Nev. 89503.

Also available on a monthly rental basis (\$6.50 and \$7.50) are about 125 titles of considerable diversity from Books on Tape. For a catalog write Dept. SR, P.O. Box 7900, Newport Beach, Calif. 92660.



□ At the top of a newly released line of twelve different Nagatron stereo phono cartridges is the HV-9100, a hand-assembled, individually tuned "ribbon" cartridge that works in a manner similar to ribbon velocity microphones. It works with a very fine wire ribbon suspended within a magnetic field. Since the ribbon design uses no internal coil, internal inductance is almost zero and therefore the signal is phase coherent. The HV-9100 is supplied mounted in a headshell made of a special acrylic resin, the strength and density of which are said to reduce shell resonances to a great extent. The shell is equipped with a standard four-pin mounting plug suitable for many Japanese and European tone arms. Frequency response is 20 to 30,000 Hz with channel separation of 25 dB at 1.000 Hz. Nominal output voltage is 0.04 mV at 5 cm/sec. Output impedance is 3 ohms at 1,000 Hz, and the recommended load is 10 to 30 ohms. The stylus is a 0.4 x 0.8-mil elliptical nude diamond; dynamic compliance is nominally more than  $7 \times 10^{-6}$  cm/dyne. Price: A matching pre-preamplifier, the \$220. HA-9000, is also available at \$275

Circle 120 on reader service card



#### Medium-power Integrated Amplifier From Kenwood

□ The KA-5700 is Kenwood's new mediumpower stereo amplifier. The unit features bass and treble controls calibrated in 1-dB increments with click-stop switches, and there are power-output meters on the front panel. Switchable loudness compensation is included, along with a subsonic filter that cuts in a 6dB-per-octave slope from 18 Hz down. The KA-5700 has a "tape-through" circuit that permits dubbing from one tape machine to another while the amplifier is simultaneously being used for playing another program source. The unit will handle and switch two pairs of loudspeakers.

The KA-5700 is rated at 40 watts per channel continuous into 8 ohms from 20 to 20,000 Hz. Harmonic distortion is 0.04 per cent, intermodulation distortion 0.02 per cent. The phono inputs can handle up to 180 millivolts before overload; phono-input signal-to-noise ratio is 76 dB. The high-level inputs have a 100-dB signal-to-noise ratio. The unit, supplied in a metal cabinet, weighs 16.8 pounds and measures approximately 15 x 5½ x 1134 inches. Available as options are a walnutveneer cabinet, wood side panels, and carrying handles. Price: about \$190.

Circle 121 on reader service card



□ The development of video recorders required very high-density recording capability in both tapes and machines. TDK has for some time been producing Super Avilyn "high-density" video tape for the ¾-inch "U-Matic" system widely used in professional and industrial applications. The company has now announced that this same formulation is being marketed in VAT-60 (1 or 2 hours, depending on machine setting) and VAT-120 (2 or 4 hours) cassettes to fit VHS-format machines. Price: VAT-60, \$19.95; VAT-120; \$27.95.

Circle 122 on reader service card



□ Among the features of the new K/6A Stereophones from Koss are soft, contoured ear cushions and a wide sponge headband cushion. Frequency response is 10 to 16,000 Hz from the  $2\frac{1}{2}$ -inch dynamic drivers. Impedance is 100 ohms at 1,000 Hz, and total harmonic distortion is less than 1 per cent for a 100-dB sound-pressure level. The K/6A weighs 13 ounces without the supplied 10-foot (extended) coiled cord. Price: \$24.95.

Circle 123 on reader service card

(Continued on page 24)



Most advertising is. Clever headline (like this one), sharp photo, slick copy.

Happiness, they tell us, is smelling like Joe Namath, eating an Egg McSomething or wearing shirts without ring around the collar. So we buy and nothing magical happens.

Our advice: clip the ad if you like it. Be much more cautious before *buying* a product.

About turntables. With 48 manufacturers competing for your attention and dollars, claims can get pretty wild. They keep telling us why this year's wonder is so much better than last year's miracle.

At Garrard, we know that the only way to stay ahead of the competition is to upgrade technology and features—not claims. That's how we've stayed at the top for over 50 years.

We believe our new GT turntables are the finest and most dependable Garrard has ever produced (they're warranteed for 3 years).\* Now that's a strong claim and we've just suggested that advertising claims are self-serving. So here's what others say about our turntables.

**High Fidelity** on the GT35: "...Its...tonearm... one of the lowest in mass of this general type that we have ever encountered..." **Audio** on the GT35: "...should give years of ,trouble-free service..."

**Stereo** on the GT35: "...worked perfectly, and with impressive silence and smoothness..."

**Popular Electronics** on the GT25:::.cannot be dismissed as just another record player...the tonearm is compatible with <u>any</u> cartridge presently manufactured, no matter how compliant it may be...an excellent medium-priced record player."

**Radio Electronics** on the Delglide Automatic System (in <u>all</u> GT models): "...the pick-up arm is handled more gently than could be done by the steadiest of hands..."

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turntable construction to reduce

mass and resonance to new lows.

Result: new benchmarks of

Finally, the integration of a

carbon fibre design tonearm. The

famous LMF Carbon Fibre tone-

arm was the model for the tone-

arm found on the ADC 1700DD.

And now, our engineers have

First, we brought you the

In fact, until now you had to make a separate investment in an ADC tonearm to achieve this level of performance. A level of performance never

before available on an integrated turntable.

The mass is lowered by the development of a tapered profile. It is statically balanced with a lead-filled decoupled counterweight, and the headshell is molded carbon fibre, long known for its low mass to high tensile strength ratio.

Furthermore, the headshell is connected to the arm with gold plated computer terminal pins. And the main bearing cradle is made of sintered aluminum. The pivot system utilizes micron polished instrument bearings which are hand picked and matched perfectly to both the inner and outer races, for virtually frictionless movement.

CIRCLE NO. 12 ON READER SERVICE CARD

The viscous cueing is a gentle 4mm/sec., and the tempered spring anti-skate adjustment is infinitely variable to 3.5 grams.

The design, the materials and the details interact to provide incomparable performance for a tonearm on an integrated turntable system.

In fact, the tonearm alone is worth the price of an ADC 1700DD.

Finally, resonance conquered. The technical know-how that

conquered the problems of the tonearm mass, also conquered the problems of turntable resonance. The ADC 1700DD reduces

resonance to levels so negligible they are virtually nonexistent.

The achievement lies in the innovative construction formula for the turntable base that incorporates the latest advancements from European engineers.

The base is constructed with two dissimilar materials that are resonance-cancelling. First, the outer frame of the base is molded, and then a composition of foamed concrete is injected to absorb and neutralize resonance and feedback. Beyond even this foamed concrete antiresonance breakthrough, the base is isolated by energy absorbing, resonance-tuned, rubber suspension feet.

This is as close as technology has ever come to defying the physical laws of resonance.

The motor in the ADC 1700DD is also present standard of excellence: Direct Drive Quartz Phase-Locked Loop. The quartz is used in the reference oscillator of the motor.

An electronic phase comparator constantly monitors any variance in the speed, making instantaneous corrections. Even when out of the Quartz-Locked mode, the optical scanning system keeps drift at below 0.2%. A

> In fact, to check the speed at a glance, we've engineered the 1700DD with a pulsed LED strobe display for your convenience.

Low-mass. Low-resonance. High performance.

What is the result of all these breakthroughs? Pure pleasure.

The pleasure of enjoying your favorite music with less distortion and coloration than you may have ever experienced before. Now you can truly appreciate the integrity of the original recording. Our engineers have reduced record wear and music distortion to a point where rumble is -70dB Din B, and Wow and flutter less than .03% WRMS.

In the history of audio technology, significant breakthroughs have been made over the past four years with the development of Quartz Lock Direct Drive, carbon fibre tonearms, foamed concrete anti-resonance construction. And now, ADC is the first to bring them all together in the 1700DD. We invite you to a demonstration of this and the other remarkable ADC turntables at your nearest franchised ADC dealer.

Or, if you'd like, write for further information to: ADC Professional Products, a division of BSR Consumer Products Group, Route 303, Blauvelt, N.Y. 10913.

Low-mass. Low-resonance. We think you'll be highly interested.

Distributed in Canada by BSR (Canada) Ltd., Rexdale, Ont. \*Accutrac is a registered trademark of Accutrac Ltd.



## **New Product/** latest audio equipment and accessories



**Bose Speakers** 

□ The latest development in the increasingly popular macramé hanging speaker supports is a design created specifically for the Bose series 901 speaker systems. The hangers suspend the speakers approximately 18 inches from the ceiling; they are available in either jute or herculon fibers and in twist or tightsquare-knot styles. According to material and style, the hangers for the Bose speakers range in price from \$25 to \$36. Similar designs are available for other speakers from \$20 to \$26 for medium sizes and from \$25 to \$32 for large sizes. Manufacturer: Macramé by Kerry, 5937 Simpson Avenue, No. Hollywood, Calif. 91607

Circle 124 on Reader Service Card



□ JVC's Model JA-S55 integrated stereo amplifier is part of the manufacturer's "Triseries, meaning that the phono-DC'

preamplifier, high-level, and power-output stages are all DC configurations. The 60-wattper-channel continuous-power rating is referred to 8 ohms from 20 to 20,000 Hz with no more than 0.02 per cent total harmonic distortion. Intermodulation distortion is 0.01 per cent at rated output, and the signal-to-noise ratio for the phono inputs is 81 dB. The phono inputs overload at 230 millivolts. Prominent on the JA-S55's front panel are two large power meters calibrated in watts (referred to 8-ohm loads) and decibels. The bass and treble controls have ranges of ±8 dB at frequencies of 100 and 10,000 Hz, respectively. Tapemonitoring facilities include dubbing from either of two decks to the other, and there are pushbuttons for tone-control defeat, infrasonic filter, and loudness compensation. The amplifier measures 163/4 x 6 x 133/8 inches. Approximate price: \$300.

Circle 125 on reader service card



#### La Scala **Opera Poster** Reproductions

□ Twelve full-color reproductions of opera posters commissioned by the Italian music publishers G. Ricordi are available from Fiesta Arts. They date from the early part of this century and reflect the stylistic influences of the time. Among the selections are posters for Puccini's Turandot (shown), Madama Butterfly, and Manon Lescaut, Adriana Lecouvreur (Cilèa), and Parsifal (Wagner). The posters measure 271/2 x 191/2 inches and are packaged in clear plastic envelopes and shipped in heavy mailing tubes. Price: \$7.50 each plus .50¢ postage. A color brochure will be sent for \$1 (which is refundable with the first order). Write direct to Fiesta Arts, Inc., Department SR, Greenvale, N.Y. 11548.



Among three Fosgate amplifiers for automobiles is the top-of-the-line PR-2100 (shown), a biamplified system with a total power output of 50 watts per channel into 8 ohms from 20 to 20,000 Hz with total harmonic distortion of less than 0.03 per cent. Woofer and tweeter frequencies are independently selectable for five different settings ranging from 125 to 2,000 Hz. The preamplifier incorporates an active equalizer circuit, and it is dashboard-mountable. Suggested placement for the power amplifier is in the car trunk. Frequency response for both modules is 20 to 20,000 Hz  $\pm 0.25$  dB, and noise is down -80 dB from full power. Fosgate packs a warning notice with each unit to the effect that it can develop a level of 115 dB in a closed car! The preamp measures 734 x 178 x 314 inches and the power amp 141/8 x 21/2 x 8 inches. The PR-2100 is priced at \$369.95, and appropriate speakers are also available.

Circle 126 on reader service card



□ Avid's new line of five speaker systems features a design that integrates driver units, cabinet enclosure, and grille assembly in a manner intended to reduce cabinet diffraction effects. At the top of the series is the Model (Continued on page 28)



## With BASF you can fill a room with sounds you never heard before.

#### Sensitive Sound.

Using an anechoic chamber, the finest sound equipment available, and the most sensitive tape ever made, we were able to capture the sound of the wingbeats of a butterfly in flight ... a sound similar to that of a great bird of prey.

#### More sensitivity for more music.

never heard it before on cassette.

It is a startling demonstration of the sensitivity of our New Professional Series Cassettes. You get more headroom, greater dynamic range, a better signal-to-noise ratio and unheard of sensitivity. And that's why you hear music the way you have

#### Sounds of other worlds.

Visit your BASF dealer soon and ask him about the New Professional Series, including Professional I, our new ferric formulation, Professional II, our new second generation chrome formulation, and Professional III, our new ferrichrome formulation that is ideal for auto cassette players.

If you would like to discover the sounds of an ant in distress, an eye winking, a butterfly in flight, and other neverbefore-recorded sounds, send \$3.50 to BASF OTHER WORLDS,

Box 18367, Boston, Mass. 02118. We will send you a \$4.99 Profes-

sional II C-90 cassette with these sounds. This offer will be available while supplies last. Please allow 4 weeks for delivery.



RASE

Sensitive Sound. From The People Who Invented Magnetic Tape.

(The SoundSpace<sup>™</sup> Control by Advent.)

## Another Step Closer To Hearing It All.



The last real frontier in sound reproduction is the ability to change your living room, electronically, into the kind of space where music sounds best -a good-sized space where music has room to expand and reverberate, and where the right spatial proportions and right combination of sound reflection and sound absorption produce rich, warm, and clear acoustics.

The SoundSpace<sup>™</sup> control by Advent is a new electronic product, using the most sophisticated technology ever applied to home audio, that allows you to convert your living room into a whole range of good listening spaces of varying sizes and acoustics. It lets you experience music much as it sounds in concert halls, theaters, night clubs, cathedrals and public listening spaces.

The idea of bringing home concert-hall-and-other acoustics isn't new, and many products — from reflective speaker systems to analog and digital timedelay products — have attempted to imitate the way in which sound is shaped in live listening experiences. But Advent's SoundSpace control is the first product to allow the listener to accomplish, easily and repeatably, what really needs to be done.

The SoundSpace control makes a dramatic audible difference in the way music sounds in a living room, a far greater and more realistic difference than anything you can experience by changing or improving conventional stereo components. It provides a three-dimensional "presence" that can't be achieved with tone controls, equalizers, reflective speakers, or added amplifier power. It expands and enlivens the sound of all kinds of recorded and onthe-air music — including the many rock and other recordings where the only original listening space you can bring home is the one in the heads of the musicians, producer, and engineers.

#### What It Does.

The SoundSpace control is a 32,000-bit computer that uses the equivalent of more than 43,000 transistors. (One good indication of the sophistication of the SoundSpace control's memory and logic circuits is that in the days of vacuum tubes their hardware would have filled an auditorium—and required enough power to light up a city block.)

The SoundSpace control converts analog musical waveforms from a preamp, integrated amplifier or receiver to digital pulses for processing by its memory and logic circuits, and adds time-delays that are multiply mixed and recirculated to model the ways in which sound is delayed, reflected and absorbed in good public listening spaces. The delayed signals it creates — from standard stereo recordings and broadcasts — are reconverted to analog signals after processing, and are meant to be fed to a second amplifier (which needs no controls) and heard over a second set of two or more speakers placed at the sides and/or rear of a home listening room.

Taking over all the complexities of modeling acoustic space, the SoundSpace control leaves you to make the two basic, desirable choices for creating the kind of listening space you want.

First you choose the audible size of the space you want to create, from a small club to a vast cathedral. You make the choice with the help of a digital "Size Index" readout.

After choosing how big a space you want, you can then adjust the Reverberation control to select

any of a whole range of acoustic environments—from very "dry" to very "live" in reverberation. You can, in effect, fill the hall with sound-absorbing surfaces and people, or empty it for sound that resounds dramatically.

As you make these choices, the SoundSpace control automatically makes countless other choices for you. It puts you, for instance, in the theoretical "best seat" in any space you create, and sets a "stage depth" appropriate to the size of the listening space. And in the process, it makes the many thousands of choices related to basic acoustics (including matters like coefficients of reflection and delay amplitudes) with no need for computations by the listener.

Instead of having to make a series of complex and largely unknowable choices on your own, you simply choose how big and how reverberant a space you want to create in your listening room.

#### The Difference From Everything Else.

In order to bring home the kind of sound people can enjoy in public listening spaces, you have to do more than simply offer the listener some kind of "delayed sound" to mimic the ways in which time-delays produce big-hall acoustics. Reflective speaker systems, for instance, don't produce enough of a time-delay to model the public listening experience, and their effect can't be varied to produce different conditions to suit different kinds of music. Analog "bucket-brigade" time-delay products also don't have the flexibility needed to reproduce actual listening conditions, and have audibly limited dynamic range and bandwidth. And earlier generations of digital time-



The computer-grade construction of the SoundSpace control is the most advanced in home audio equipment.

delay devices have suffered from noise and distortion, difficult-to-use controls, and a model of acoustic space that was so limited that it tended to produce sound a lot closer to what you might hear in an underground parking garage than in a good concert hall or theater.

The SoundSpace control accurately models the characteristics of *good* acoustic spaces, employing parameters based on intensive study and computer analysis of actual auditoriums. It operates with vanishingly low noise and distortion (less than 0.1%), 80 dB of dynamic range, and controls that are both effective and easy to use. It sounds like the highest-fidelity product it is.

Whether you want the closest possible approach to "live" sound or the biggest, widest-screen presentation of what a George Martin or Peter Asher has in mind when producing a recording in a studio, we think you will find Advent's SoundSpace control a tremendously enjoyable product to own.

The suggested price of the SoundSpace control is \$595.\* For more information and a list of Advent dealers, please send us the coupon.

Thank you.

r	2623 - 10586 - 10586 - 10586 - 10586 - 1058
	To: Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.
	Please send information on Advent's SoundSpace™ a control, and a list of your dealers.
	Name
	Address
	City
R.	State Zip
	Subject to change without notice.

Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.

## **New Product/** latest audio equipment and accessories

330 (shown), a three-way, air-suspension system containing a 12-inch woofer, 2-inch midrange, and 1-inch tweeter (crossover points are 500 and 6,000 Hz) controlled in level by separate three-position mid-range and tweeter switches. Impedance is 8 ohms, and frequency response is 35 to 20,000 Hz ±3 dB. Efficiency is 88 dB (sound-pressure level at 1 meter with 1 watt input), with a minimum recommended power input of 15 watts and a maximum of 250 watts. An auto-reset overload-protection circuit is incorporated. The cabinet is finished in walnut veneer with a dark brown grille. The system measures 301/4 x 17 x 10<sup>1</sup>/<sub>4</sub> inches and weighs 60 pounds. Price: approximately \$375.

Circle 127 on reader service card



□ As replacements for earlier highly acclaimed models, Yamaha has introduced the new AM/FM T-1 and the FM-only T-2 tuners. The top-of-the-line T-2 (shown) provides digital station-frequency readout together with a wide, linearly calibrated tuning dial. Not only is the i.f. bandwidth switchable between high and normal selectivity (in fact, the T-2 switches to high selectivity automatically when signal strength falls to 50 microvolts), but the T-2 also has circuits in the r.f. section that can be switched to favor either high sensitivity or high selectivity. A signal-canceling circuit that tracks the strength of the broadcast being received reduces the level of the 19-kHz stereo pilot signal in the tuner's output by 72 dB.

The T-2 has a usable sensitivity of 1.5 microvolts in the high-sensitivity r.f. mode and 3 microvolts in the high-selectivity mode. Alternate-channel selectivity is 100 dB in the highselectivity i.f. mode (called DX on the front panel) and 55 dB for normal selectivity (called LOCAL). Mono harmonic distortion ranges from 0.03 to 0.08 per cent (LOCAL) or 0.1 to 0.4 per cent (Dx). Stereo separation at 1,000 Hz is 35 dB (Dx), improving to 55 dB in the LOCAL mode. Capture ratios are 1 dB (LOCAL) and 1.5 dB (Dx). Image and spurious-response rejection are both 120 dB. Frequency response is 10 to 18,000 Hz +0.3, -3 dB (30 to 10,000 Hz + 0.3, -0.5 dB). The T-2 measures about 171/4 x 23/4 x 133/4 inches and weighs approximately 15 pounds. Price: \$700

The AM/FM T-1 also has a switch for i.f. bandwidth. Usable sensitivity is typically 1.7 microvolts with a 50-dB quieting sensitivity of

3 microvolts. Alternate-channel selectivity is 55 dB (92 dB in Dx). Harmonic distortion (mono) ranges from 0.5 to 0.3 per cent, depending on the setting of the i.f.-bandwidth switch. Stereo separation at 1,000 Hz is 55 dB (30 dB in Dx). Capture ratio is 1 dB, image and spurious-response rejection are 90 and 100 dB, respectively, and frequency response is 30 to 15,000 Hz  $\pm$ 0.5 dB (50 to 10,000 Hz  $\pm$ 0.3 dB). The T-1 weighs about 12½ pounds and measures approximately 17¼ x 4 x 15 inches. Price: \$350.

Circle 128 on reader service card



Parenthian's Three-piece Biamplified Speaker

□ The Parenthian Model 3600 speaker system combines two almost-full-range threeway modules with a single subwoofer module extending response down to 20 Hz. The subwoofer, employing a 15-inch driver, contains its own 150-watt amplifier (less than 0.05 per cent distortion) as part of a motional-feedback system to maintain woofer linearity electronically over its operating range. The outboard modules each contain two 8-inch drivers (one of which operates over a restricted frequency range in such a way as to acoustically damp the other), a 2-inch upper-midrange dome driver, and two small film-diaphragm dynamic drivers angled slightly outward. As with the rest of the Parenthian line, plate glass is used extensively in the construction of the enclosures, both alone-resulting in transparent panels in some cases-and in combination with wood laminate.

Nominal operating ranges for the Model 3600's drivers are 20 to 80 Hz for the subwoofer. 80 to 500 Hz for the 8-inch drivers, 500 to 4,000 Hz for the 2-inch dome, and 4,000 to beyond 30,000 Hz for the film-diaphragm devices. The crossover networks are 'multipoint,'' introducing progressively sharper cutoffs for frequencies further from each driver's operating range. On-axis frequency response in a "simulated room" is rated at 25 to 23,000 Hz  $\pm$ 3 dB. Response is within 3 dB of the on-axis specification at lateral angles of up to 45 degrees off axis. The outboard modules will handle up to 100 watts of program material, with 50 watts of amplifier power the recommended minimum. Impedance is 6 ohms nominal, 4 ohms minimum. A high-pass filter attenuates the woofer output at a rate of 24 dB per octave below 10 Hz. Each of the outboard modules is 4634 x 19 x 41/2 inches; the subwoofer commode measures 2334 x 18 x 18 inches. Price of the complete model 3600 ensemble: \$1,799.

Circle 129 on reader service card



□ The 3M Company has added an eighttrack cartridge to its "Scotch" Master line of recording tape. The high-output, low-noise ferric-oxide tape used is said to provide high-frequency sensitivity 6 dB higher than standard cartridges. The new tape has a 2-dB increase in maximum output and 4 dB lower noise level than standard cartridges. A new binder system for the oxide is employed, and the cartridge case is precision-molded. Prices are \$3.99 for the 45-minute length and \$4.69 for the 90-minute version.

Circle 130 on reader service card

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturer.

Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. Please be aware that the prices quoted in this issue may be subject to change. Who needs the accuracy of Technics quartz-locked, direct-drive turntables? Professionals do. That's why radio stations use them and discos abuse them.

Now you can get all the accuracy of cur professional turntables with the SL-1301 fully automatic and the SL-1401 semi-automatic, our new quartzlocked, direct-drive turntables. Accuracy like wow and flutter of only 0.025% WRMS, rumble of -78 dB (DIN B) and speed drift within 0.002%. That's professional accuracy.

How did our engineers achieve it? They started with a Technics hetero-pole, direct-drive motor. Next, they combined the functions of over 1,100 discrete circuit components into 3 IC chips, the same IC's found in our professional turntables. In one of these IC's you'll find the most reliable speed-reference device ever used in a turntable: A frequency generator quartz oscillator.

To dramatically reduce annoying acoustic feedback, both the SL-1301 and SL-1401 take advantage of Technics unique double isolated suspension system. One suspension damps out vibration from the base while the other absorbs vibilations from the platter and tonearm.

At the same time, Technics computer-analyzed, gimbal suspended S-shaped tonearm reduces friction to a mere 7 mg while it greatly increases tracking sensitivity.

The SL-1301 and the SL-1401. Both give you the accuracy of our professional turntables. With one big difference, the price.

## **Technics**

# There are few differences between our professional turntables and these quartz-locked turntables. Accuracy isn't one of them.



Rooms have a way of making music suffer. Their furnishings upset music's tonal balance by absorbing, and muffling certain frequencies.

But now, we've created a remedy to help cure room acoustical problems. Help ease mid-treble harshness. Help calm booming mid-bass. Help balance every octave. And help liven your music.

It's all from our newest component. Our model 2102 stereo graphic equalizer. The price is within your budget. The warranty is five years, and transferable. And the medicine is easy for your ears to swallow.





#### AMPLIFIERS WITH CLASS

N this month's pages on new audio products there are numerous references to amplifier "class": class A, class B, class AB, etc. What do these class distinctions mean, and how important is it to understand them? What they mean I'll try to explain in the next few paragraphs. Whether they're important or not remains a question each must answer for himself. Certainly they have a great influence on the cost and power output of an amplifier, but whether they have a consistent, audible effect on the sound quality of an amplifier is, and has been, a rather controversial issue.

AND STATE OF SHARE

A high-fidelity power amplifier-and virtually all of this discussion will refer to power amplifiers-almost invariably employs a push-pull output stage with one or more groups of transistors (or vacuum tubes) generating the actual output. Visualize an upper and a lower transistor, with the upper one bearing major responsibility for any positive excursions of the audio waveform and the lower one carrying most of the load on the negative excursions. A useful analogy is that of a twoman saw. Let us say that two lumberjacks using such a saw are constantly either pushing or pulling, so that both men are working full time. This corresponds to class-A amplifier operation. (Incidentally, I am told it is not practical to push a conventional two-man saw, but for the sake of this analogy we'll pretend it is.) Now suppose that the lumberjacks agree upon an arrangement whereby each man works only half the time. In other words, when the saw has been drawn wholly into lumberjack one's territory, he stops working and rests for the other half of the "cycle" while lumberjack two pulls the saw into his territory. This is like class-B operation.

Sawyers will tell you that such brief respites during each sawing cycle make their lives a little easier. Similar "half-holidays" certainly make life easier for an amplifier designer dealing with real-world transistors. To get output from a transistor one applies a control signal to it. But how much signal? With a tiny signal nothing much happens. Then, as the signal increases, the transistor begins to come somewhat erratically (nonlinearly) to life. With still more signal, the output starts to increase with some regularity, and this is the "linear" portion of the transistor's operating range, in which it can be considered useful as a high-fidelity amplifying device. Finally, when the signal gets to be too large, the transistor, depending on its type, either blows itself out or again becomes nonlinear.

An amplifier designer wants to make the most of a transistor's linear range and at the same time to stay as far as possible from its nonlinear regions of operation. To avoid the nonlinearities at low signal voltages he arranges for a constant d. c. voltage, called the *bias*, to be applied to the transistor, so that it is always more or less turned on, even when there is no input signal to the amplifier. Hence, the transistor has some "head start" and the gross nonlinearities of its low-voltage



30

operating range are avoided to some extent. This is a class-AB bias situation. Should the designer choose to increase the bias to eliminate even more low-level nonlinearities, the amplifier will usually run warm. Let him increase it to the point where the transistor is always fully turned on and class A is reached.

Class-A operation does a fine job of keeping the transistor in the most distortionless mode possible, but it also takes the device just that much closer to the excessive-signal region, and it therefore "wastes" a considerable portion of the linear operating range. What's left over amounts to appreciably less "headroom" for handling the audio signal, which is why class-A designs typically have rather modest power-output ratings. And since the transistor is always "on," the amplifier consumes electricity at a brisk rate. which it turns into heat, not sound. This is not an attractive situation to an amplifier designer, so he is usually inclined to take a closer look at class AB to see if there aren't a few more options open.

Remember that we're virtually always dealing with paired transistor sets in a push-pull configuration when it comes to power amplifiers, so the point at which we can expect trouble is the transition area where one transistor group is just letting go ("turning off") and the other is just taking hold ("turning on"). In class AB there is always going to be a little nonlinearity (distortion) in this area, both because the transistors are in their low-level ranges and because they are never-at least in the real world-perfectly matched to one another. The resultant distortion is referred to as "notch" or "crossover" distortion. These distortions are going to be constant in level no matter what kind of audio signal the amplifier is handling, which is one of the reasons why, in many amplifiers, distortion percentages tend to go up as power output is reduced. To avoid poor distortion figures at low power levels, an amplifier designer is often inclined to bias a little closer to class A in the class-AB design.

Today, however, with sophisticated integrated circuits ready to hand, a designer is not necessarily obliged to stick with only one bias condition. A significant number of this year's new amplifiers incorporate automatic control circuits that bias them at class A for output levels of a few watts and at something closer to class AB as the power-output demands of the music signal get significantly greater.

s this the best of both worlds? Well, time will have to tell. The probability is that such amplifiers will tend to consume somewhat more power and run a bit hotter. At the same time, they should be able to show less measurable distortion at low power-output levels. But the big question is whether this lower distortion will have any audible significance. As prominent as notch distortion can be made to look in a laboratory measurement, in any competent amplifier design it still amounts to a very small actual output from any loudspeaker the amplifier is likely to be called upon to drive, probably well below the ambiant-noise level in any practical listening room. The battle of the classes is certain to continue, and some of the new amplifiers may just bring it closer to a resolution. However, the betting here is that the issue is really not much of an issue and that we'll have to look elsewhere for the reason why our amplifiers' sound tends to please or displease us.

## Introducing THE BOOM BOX.

#### It's like listening with your whole body.

You know how good a live bass feels. It talks to you through your chest.

So you know how tough it is to get that sound – and that feeling – when you're listening to records.

But now, you can get fast, fast relief from pale bass. Just hook up one dbx Boom Bcx. And stand back.

In just milli-seconds the Boom Box goes to work so you can feel all the vibrant, low frequency energy of live bass. Because the Boom Bo> recreates the low frequency sound that's often deliberately left out in the recording studio. You actually feel the blast of air a real bass note produces.

The Boom Box does this by seizing the lowest notes, instantly creating new notes an octave lower, and then realistically putting them back into your music. Low frequency notes surge through your hi fi system.

The Boom Box works on any music system that has a tape monitor switch. And it not only makes modest systems sound expensive, it makes expensive systems sound unbelievably real.

Hear the Boom Box. Feel the Boom Box. At your dbx

dealer. You'll experience an all-time "low" in musical enjoyment.

> dbx, incorporated 71 Chapel Street Newton, MA 02195 617/964-3210

CIRCLE NO. 22 ON READER SERVICE CARD

# Feastbur Ears.

Hear The System. You'll hear the sound faithfully reproduced. Not artificially manufactured by the equipment. Because the equipment is Mitsubishi.

And Mitsubishi has a standard: what comes out must be as real as what went in.

You'll hear a system where every component has been perfectly matched to every other component. Yet each a precision instrument in its own right.

You'll see new equipment with new capabilities, new features, new designs.

The new amplifier. Not mere stereo, but dual monaural. We call it the DM Factor. For inter-channel separation at 20kHz at better than 80dB. For THD at lower than 0.01% at rated output. For remarkable clarity and definition. Ten violins sound like ten violins instead of one big mushy solo.

The new preamplifier. With the DM Factor. Exclusively Mitsubishi. For THD of 0.002%. And specially developed to effectively handle the moving coil cartridge. For a signal-to-noise ratio of -77dB. Unheard of in any other preamplifier.

The new frequency synthesizing tuner. With THD in stereo at barely 0.08% at 1kHz. Conservative, at that. With switched selectivity for uncompromising reception. With digital read-out. With LED's to determine signal strength and precise tuning. With an uncanny ability to zero in on the quietest signal.

The turntable. Our direct drive high torque servometer eliminates gears, belts and pulleys. And with them wow, flutter and noise. Our logic control eliminates unreliable mechanisms in the nerve center. Our high resolution tone arm eliminates virtually all resonance. Everything you never wanted in a turntable. The loudspeakers. Meticulously constructed. Painstakingly tested. For the exact response that sounds like music, not speaker. The final link in a faultless system.

And not least, the equipment rack. As unique as The System. As clean and uncluttered as the sound.

We could go on reprinting specifications. We could go on employing adjectives. But nothing will tell you more about our audio equipment than your audio equipment.

So hear The System. See it. Take it apart. Compare all the possibilities. All Mitsubishi or only a part. You won't settle for anything less than the whole.

Because if we've got you so far, just wait till we get your ears.




## Tandberg Presents ACTILINEAR Recording

Open reel & cassette recorders can no longer be looked upon as add-on units in today's extremely sophisticated high fidelity sound systems, but rather as components within a total system with performance capability as technically advanced as all other components of that system. In order to achieve this, Tandberg has

developed a completely new tape recording technology known as the AC-TILINEAR (Patent pending) System, the only recording technology available on the market today that can fully exploit the new high ccercivity metal particle re-cording tape being developed.



More pertinent right now is the fact that Tandberg's new ACTILINEAR Sys-tem, when used with the soon-to-be-available metal particle tape, offers performance parameters approaching those of experimental PCM technology, yet is compatible for playback on all existing tape recorders.

In conventional recording systems, the summation of record & bias current in the record head is done through passive components, leading to com-promise solutions which have their distinct and pronounced weaknesses.

Tandberg engineers have developed a new recorcing technology without compromises. In the new ACTILINEAR System, the passive components have been replaced with an active Transconductance arr plifier. Among the benefits of this new approach are:
Up to 20 dB more headroom

 Less intermodulation due to Slew Rate limitation

 Improved electrical separation and less interference between the bias oscillator and record amplifer

 No obsclescence factor — useable with any type of tape, available now or in years to come

With its unequalled 30 year tradition in tape recorder technology, Tandberg has always been recognized worldwide for its quality products. And now, with the superior performance advantages of the ACTILINEAR System in Tandberg's new TD 20 A open reel deck, as well as the TCD 340 A and TCD 340 AM cassette decks, you will for the first time be able to achieve tape recorder performance capability equal to or better than all other components in a sophisticated sound system.

Tandberg of America, Inc., Labriola Court, Armonk, N.Y. 10504

TANDERRE

CIRCLE NO. 74 ON READER SERVICE CARD

## Audio Q. and A.

States and the second



#### Four-ohm Power

Since most amplifiers have a higher power output at 4 ohms than at 8 ohms, is it possible to connect 8-ohm resistors in parallel with 8-ohm speakers to provide 4-ohm loads to the amplifier (and thus take advantage of the higher output)?

> BILL GOODRICH West Springfield, Mass.

A. Yes, but half the new, higher power available will do nothing but heat up the added 8-ohm resistor. The net result would be less total power available at your loudspeakers.

## Amplifier Damping Factor

What effect does the "damping factor" of a receiver or amplifier have on its performance?

> OTIS SMITH Hollywood, Calif.

Among all the amplifier specifications, Α. damping factor is probably the least understood and the most worried about. Perhaps by increasing the understanding we can allay some of the anxiety. The damping factor of an amplifier refers only to the source impedance seen by a speaker at the amplifier's speaker-output terminals. This source impedance has nothing to do with the amplifier's ability to drive 4-, 8-, or 16-ohm loads but refers specifically to the effective "resistance" in the amplifier's output circuit.

What is the significance of this source impedance? If you were to feed a single pulse of energy into a woofer, the woofer cone would move in or out depending on the polarity of the signal. But whether it bounces about momentarily or overshoots (goes too far) at full excursion depends largely on the damping of the system. After all, the cone is suspended on a springy compliance, and spring systems usually require some kind of stabilizing damping. A low source impedance in the amplifier means that it provides some electrical damping of the speaker-cone movement. (The speaker's magnet assembly and the amount of flux it applies to the voice-coil gap are contributing elements in establishing the effectiveness of the amplifier's damping factor. In this connection, too heavy a magnet for a given design can overdamp the system, causing loss of bass response.) Acoustical damping is also supplied by the enclosure, and some drivers have a great deal of mechanical damping built into their suspensions as well.

A very high damping factor (2,000, say) indicates that the amplifier's source impedance is very low. For reasons having to do with the design of the speaker and speaker-output circuit, however, such a super-high damping factor doesn't really do anything for speaker performance. Here's why: a damping factor of, say, 20 means that an 8-ohm speaker will see a source impedance of 0.4 ohm. "Improving' the amplifier's damping factor to 2,000 would mean that the speaker would then see a 0.004ohm source impedance. This is not a significant improvement because the resistances of the speaker's voice coil, the crossover network, the speaker cable, and, possibly, a speaker-line fuse are, in effect, all between the amplifier and speaker. If these various elements total perhaps 6 ohms, then it's easy to see that any "improvement" that reduces the total series resistance from 6.4 ohms to 6.004 ohms would be of much greater benefit to an advertising copy writer than to an amplifier user. The consensus among experts on the matter seems to be that damping factors above 20 or so do nothing to improve amplifier/speaker performance-so long as all other factors remain the same.

However, there is one little-appreciated aspect of the question that shouldn't be overlooked. It could well be that a given amplifier's damping factor is very high at mid-frequencies (where it is usually rated) but falls to very low values at low frequencies (where it may be most needed). This was true of many tube amplifiers (because of deficiencies in their output transformers), but it should never be a problem with modern solid-state audio equipment.

What effect would a damping factor much lower than 20 have? Certainly nothing very terrible; it would simply cause the speaker's impedance variations at low frequencies to become audible. The bass might go from "tight" to "fuller" to "mushy," depending on where it was to start with. Anyone who would like to simulate the effect of a very low damping factor can do so by temporarily installing a 10-ohm, 10-watt resistor in one side (Continued on page 36)



In this world of mass produced look-alikes, there are always a select few products that stand out above the rest. Their purchase price is often less premium than you may imag ne, particularly when you consider their extraordinary operating flexibility, construction and years of dependable service. And, of course, their superior level of performance. Knowledgeable experts around the world place Tandberg high fidelity products in that special category The TF 2080 stereo receiver, for example, is actually made up of a recog-nizably superior electronic tuner, preamplifier and power amplifier, each on its own separate chassis, perfectly bal-anced into one integrated unit. Moreover, these individual sec-

TANDBERG

tions of the receiver offer specifications & flexibility normally associated with individual components whose total price would be much, much more than the TR 2080. So, perhaps it is even possible to consider it a bargain. See the entire Tandberg receiver line — a series that shares more than just their exquisite rosewood cabinetry. Indeed, you will discover a commonality of performance, specifications and features that reflect the world-famous Tandberg commit-ment to integrity.

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Audio Q. and A. . .

of a speaker line. Of course, the volume control will have to be turned up to compensate for the signal loss in the resistor, but what you will hear is what you would get with an amplifier damping factor of about 1. Under some conditions, and with some speakers, you might even like the results! Incidentally, low-frequency damping-factor differences may account for the low-frequency differences heard between some amplifiers (with some speakers) when the amplifiers' low ends measure the same in lab tests.

## **AM Fidelity**

**Q.** Now that people are talking seriously about stereo AM broadcasts, it seems to me that there is still much confusion about the permitted maximum and minimum frequency response on the AM broadcast band. For example, in the January "Audio News" it was stated that AM stations are capable of transmitting a frequency range of 50 to 10,000 Hz. But I've noticed other sources claiming limits of from half to double that frequency range. Do you have any late, definitive word on the matter?

> PETER FERRER Evanston, Ill.

I don't know why we have had such diffi-A. culty over the years getting a definitive reply from the various authorities we've asked, but . . . . In response to the "Audio News" item you mention, one broadcaster (station KEX in Portland, Oregon) claimed his station can and does transmit audio signals up to and beyond 20,000 Hz! A check with the FCC has clarified matters somewhat: there is indeed no effective limit on the frequency response of an AM station up to 15,000 Hz. However, signals between 15 and 30 kHz must be at least 25 dB below the level of the unmodulated carrier. The FCC also insists that stations in the same locale be spaced at least 30 to 40 kHz apart on the AM band to prevent mutual interference. And it also establishes a maximum transmitted output power permissible under various circumstances in order to prevent interference between stations on neighboring channels in different cities. So, AM stations are permitted to broadcast a full-range signal if they want to (in fact, their frequency response can be as good as that of an FM station). Nonetheless, frequency range alone doesn't determine fidelity. Noise, both atmospheric and man-made, remains a major fidelity problem for AM. No matter how clean the broadcaster's signal is, when it is picked up by the receiver it will inevitably contain noise, since noise is an amplitude modulation, just like the audio signal with which the broadcaster amplitudemodulated his carrier. (FM signals also come to the receiver with an overlay of AM noise, but receivers intended for FM reception are specifically designed to reject AM.)

Keep in mind that we are discussing potential fidelity here—what a station on the AM broadcast band can or is permitted to achieve in respect to frequency response does not necessarily correspond to what it actually sends out over the air waves, just as there are many FM stations not living up to their fidelity potential. And there's another point to keep in mind regarding AM fidelity. While hi-fi FM receivers are commonly available, the audio quality of most AM radios and AM sections of hi-fi receivers is, in general, very bad. It's quite common for an AM tuner to have a frequency range of perhaps 100 to 4,000 Hz, which means that regardless of what is put out by the broadcaster, the sound the listener hears will be substandard. It is likely that many AM stations would sound a lot better if heard on a good-quality unit-say, the McKay-Dymek AM5 AM-only receiver. Perhaps with stereo AM a real issue now, more manufacturers will start making good AM tuners and more stations will consider broadcasting a high-quality signal-that is, if they can figure out how it will help brighten their profit picture.

### Synthesizer Reproduction

Over the years you have taken a firm of stand for accurate reproduction. I agree with your arguments, but how does the question of "accuracy" relate to the reproduction of sound that had no original live reality, such as the product of an Arp, Moog, or other synthesizer? Or, for that matter, the sound from a loudspeaker driven by an amplifier being fed by an electric guitar?

> ARNOLD FOX Bronx, N.Y.

A. This question reads like a latter-day electronic version of the old philosophical paradox about the sound—or lack of it—made by a tree falling in the forest when there is no one to hear it. The "sound" of a music synthesizer is, of course, that which comes out of the speaker attached to it. Therefore, it seems to me that if a recording is made from the electrical output of the synthesizer, rather than from the speaker (or headset) used by the composer, it is up to the composer—if he cares to—to specify the speaker or headphones to be used by the listener in order to hear exactly what the composer had in mind.

Speakers that are designed to operate with certain electrical musical instruments are another matter altogether. The special sonic characteristics of the speaker and the amplifier that drives it must be considered as much an intrinsic part of the musical instrument as is the wooden body of a Stradivarius. The difference is, of course, that any electric guitar can be hooked up to a wide variety of different amp/speaker combinations. Some combinations will produce sound that is preferred to that produced by some other combinations—and most rock musicians have their particular favorites.

At the recording session, the musician usually wants to hear captured on the tape the same sonic quality he hears live from his guitar-amp/speaker combination, not simply that of the guitar plugged into the mixing board. That is why, in a recording session, microphones are always used to pick up the acoustical output of the musical instrument's speaker. Sometimes, for a special effect, the guitar might be plugged directly into the mixer for one track and be picked up via amp/speaker and microphone for another track-with the two tracks mixed in the desired ratio. It is helpful to keep in mind that a music-instrument speaker is a sound producer and a hi-fi speaker is a sound reproducer

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True four-point gimbal centers and pivots tonearm mass where vertical and horizontal axes intersect. The four needle-point pivots are tempered and honed to produce microscopically smooth surfaces. Each pivot is matched to a ball-bearing race only 0.157 inches in diameter.

> Tracking force is applied with a tempered, flat-wound spiral spring, centered around the vertical pivot. Stylus force remains perpendicular to the record even if the turntable is not level.

> > Stra ght-line tubular, shape provides maximum torsional rigid ty and lowest effective mass.

Cueing descent speed and height are both adjustable, providing complete control of stylus setdown.

> Vertical tonearm control sets and locks tonearm height at any point over an 8 mm range. Tonearm thus parallels record with any cartridge for precise vertical tracking without added mass of spacers.

## How to identify the world's finest tonearm.

When one tonearm—among all those available—is described as "the world's finest," some controversy may be anticipated. Fine, we welcome that possibility. There is far too little discussion about tonearms—considering the critical difference they make in how records sound and how long they last.

Simply stated, the tonearm's function is to provide the correct cartridge-to-groove geometry and to allow the stylus to trace the groove contours freely, precisely, and with the lowest practical tracking force.

Dual's engineering approach to tonearm performance makes us feel confident of the outcome of any comparisons.

#### The basic geometry.

The shape of the Dual tonearm is a straight line from pivot area to tonearm head, the shortest distance between those two important points. Curved tonearms may look sexier, but contribute extra mass, less rigidity and a tendency to lateral imbalance. That's hardly consistent with good engineering.

Every Dual tonearm is mounted in a true, four-point gimbal. The tonearm mass is centered, balanced and pivots precisely where the vertical and horizontal axes intersect.

Identical pairs of low-friction needle-point pivots and miniature ball bearings are used in both axes. The precision and quality control standards applied to their manufacture and assembly are usually found only in aerospace and allied technologies.

#### Settings for your cartridge.

The vernier-adjustable counterbalance lets you set zero-balance with micrometer-like precision so that tracking force can then be set accurately. A tempered, flat-wound spring applies tracking force directly at the vertical pivot, and this force remains perpendicular to the record even if the turntable

chassis is not level. Anti-skating is applied around the horizontal pivot, directly counter to the skating force, and it adjusts automatically to the varying skating force encountered by the tonearm as it moves across the record.

Another Dual refinement, not available on any other integrated tonearm, is the Vertical Tonearm Control. A vernier height adjustment over an 8mm range allows paralleling the tonearm to the record without cartridge spacers. Tonearm mass remains as low as possible, and mounting and changing cartridges are simplified.

#### Another Dual exclusive: tuned anti-resonance filters.

The counterbalance contains two specially tuned mechanical filters that absorb parasitic resonances originating in the tonearm/cartridge system and chassis. The result: flawless tracking stability maintained even in the presence of external shock and vibration whether caused by acoustic feedback, record warps or dancing feet.

#### About all Dual tonearms.

The tonearm shown and described here is part of our higher-priced turntables. But many of its features are found in our lowest-priced model: the four-point gimbal, the straight-line design, and the precise mechanisms for balance, tracking force and anti-skating adjustment.

In fact, we'd be willing to match the performance of our lowest-priced tonearm against anyone else's highest-priced tonearm. But one argument at a time is enough.

Now that you've been "armed" with the facts. we invite you to visit your audio dealer to examine the tonearms you find there—separate and built in-and decide for yourself which one is indeed the finest.

No one can argue with that suggestion.





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## No on Acetone

**Q.** I was told at one time that acetone makes an excellent head cleaner. Does using acetone pose any danger to the heads? If so, what other cleaner would you recommend?

SCOTT CHANDLER San Francisco, Calif.

A. Short of nitric acid, I can think of few more dangerous chemicals to use as a head cleaner than acetone. It will cut through accumulated oxide dust and gunk all right, but it can also attack the glue that holds the head laminations together, along with the plastic facing material used on some erase heads. Should a drop spill, it will also mar the plastic meter faces and plastic trim parts on your deck. In short. *never* use acetone for tapehead cleaning. Xylene, too, is very quick, but it is also fatal to heads.

The most effective commercial tape-head cleaners I know of use a fluorocarbon base; most of the cleaners you will find on audio dealers' shelves are basically colored alcohol, which is also safe, though a bit slower. If you want to buy your own alcohol cleaner, I recommend the pure isopropyl variety rather than a so-called "rubbing-alcohol compound," which may leave an undesirable lubricant film.

## FM-hiss Test

A. I have not yet owned a cassette deck that could exactly reproduce FM hiss, yet I'm told this is a good test for cassette decks. since it is "white noise." Are there any cassette or open-reel tape machines that can pass this test?

BILL AGRESTE Norfolk, Va.

Q. The ability to reproduce FM hiss without audible difference between the "source" and the "playback" from a tape deck is one of the most demanding tests of recorder performance. It's a good test for several reasons, not the least of which is that very few cassettes will get a 100 per cent rating. (On a math test, if half the class gets 100 per cent, the test is worthless as a measure of each individual's comparative level of understanding.) Moreover, it's a fair test, it requires no sophisticated measuring equipment or technical training, and it's a test you can perform right in a dealer's showroom. But you must perform it correctly, within its limitations, and this may be the source of your difficulty.

First, let's understand what FM hiss is. In your letter you called it "white noise," which it is not. A white-noise test signal is one in which equal energy is contained in every frequency, whether that frequency is, say, 23 Hz or 14,023 Hz. Such a signal, though useful for many applications, gives undue prominence to the treble end of the audio spectrum. The reason for this is that each successively higher octave contains twice as many discrete frequencies. For example, between 1,000 and 2,000 Hz (a span of one octave) there are 1,000 1-Hz increments, but there are 2,000 such increments in the octave from 2,000 to 4,000 Hz.

FM hiss, on the other hand, is very close (within a couple of decibels) to being a "pinknoise" test signal, which is a signal in which equal energy *per octave* is present. (Since FM hiss isn't pure pink noise in the laboratory sense, we might borrow Julian Hirsch's happy phrase and call it "rosé noise.") Pink noise is widely used in many phases of audio testing.

In testing a recorder using pink noise (or its rosé FM-hiss equivalent), you must observe the same precautions you would if you were checking its frequency response with a sinewave test oscillator. First, if the deck has a switchable "FM multiplex filter," switch it off. Ideally, such filters only chop out the 19kHz stereo multiplex pilot tone, but most have some effect on all frequencies higher than 15,000 Hz. Second, if the deck has a Dolby system, switch it off too; a misadjusted Dolby noise-reduction circuit can cause frequency-response variations that are no fault of the basic machine. Third, keep the interstation FM-hiss signal from the tuner at a low level, as indicated on the deck's record-level meters

How low? Digital and 15-ips (or faster) studio recorders should be able to copy FM hiss without any audible difference at their indicated 0-dB (0-VU) input levels. Better-grade audiophile open-reel machines should do so at a -10-dB level, and a few older machines will make it if tested at -15 or -20 dB. One or two cassette decks have been able to produce (Continued on page 44)

## THE JVC CASSETTE DECK. It gives you more of what the others wish they could.

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give you everything you need to get the most out of any tape. And there are totally new features to help you make bettersounding cassettes.

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# a giant step forof JVC cassette o

to-high musical frequency ranges. The Spectro Peak Indicator actually curately the deck has performed. uitry in sion



Top: KD-65, KD-55, KD-25: Boltom: KD-10 KD-1770 II, KD-1636 II, Not shown: KD-2, KD-3030, KD-S201.

program. Super ANRS also reduces tape hiss by boosting the deck's signal-to-noise ratio by as much as 10dB over 5000Hz.

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to the exact requirements of the tape. These innovations alone set JVC cassette decks apart from all the others. Then, when you consider our other refinements, like precision-ground capstans, gear/oil-damped cassette doors, multi-peak LED indicators, independent

> drive mechanisms, plus top performance specifications, you can understand why we say that JVC gives you more of what other decks wish they could. Visit your JVC dealer and you'll hear why.





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# Open Reel: The format

You're looking for a tape recorder. You've heard from friends and salesmen that cassette is the answer. At TEAC we make both cassette and reel-to-reel tape recorders. Because we make each for a specific person and application, you should depend on fact, not hearsay, before spending your money.

### IT'S A MATTER OF PHYSICS

There are immutable reasons why cassettes can't match open reel fidelity.

Take tape speed. Open reel tape running at 7½ ips is running four times faster than a cassette. And speed has more to do with the relationship between frequency response and signal-to-noise than anything else by far.

At 7½ ips all audio frequencies can be recorded at full level



Tape saturation vs. level at 7½ ips and 1% ips.

without tape saturation. Recording at 1% ips forces you to make drastic compromises in record levels. The more you have to back off on recording levels, the more you hurt the ratio of signal-to-noise.

In short, with a cassette deck you cannot have high frequency response and good signal-to-noise. So a cassette deck is always operating on the ragged edge of disaster. It's so much easier to get into trouble than out of it because there's a difficulty for every solution.



Comparative dropouts between 7½ ips and 1% ips at 15kHz.

#### MORE IS MORE

The faster the speed the longer the wavelength, the longer the wavelength the more protection you have against dropouts. You also have an easier job of editing.

Now take track width. Open reel gives you twice the track width of cassettes. The wider

the track width the higher the output, the higher the output the better the signalto-noise ratio. A wider track is also less sensitive to dropouts and, obviously, a wider track retains more magnetism. And while we're on the subject of magnetism, an open reel tape has twice the oxide coating of a cassette.

Upshot: A total tape volume 16 times greater than a cassette, which means 16 times more magnetic particles to store and remember music.

If that sounds better to you, if we've convinced you the cassette format is a high price to pay for convenience, then you ought to look at the TEAC lineup of open reel tape recorders.

Relative oxide volume open reel vs. cassette. If your life depended on the accurate reproduction of a single note, which format would you choose?

# for the informed.

### INSIDE INFORMATION

TEAC is a leading designer and manufacturer of computer and instrumentation recorders. In medical centers, for example, physicians depend on special TEAC units to record vital data in life-or-death situations; in remote wilderness areas, scientists depend on TEAC to monitor now-or-never phenomena like earthquakes.

From that experience we've learned that the quality of the transport mechanism is the single most important consideration in a tape recorder. For the computer industry, and for you. That's why many of the same engineers have designed the tape recorders we make for both.

Our entire reel-to-reel line has three motors and microswitched solenoid operated transport systems, a blend of computer age sophistication and brute strength that nothing else can equal. Ask anyone whose opinion you respect.



#### OPTIONAL REMOTE CONTROL

Unlike some reel-to-reel machines, TEAC decks have full-function remote capability. Our optional remote units are the perfect answer for recording sessions where you can't be next to the recorder, or for operational access to a recorder in a custom installation.



### FOUR EXAMPLES

The TEAC A-2300SX is the best selling, most successful open reel machine ever. Over 300,000 have been sold. The SR version of the A-2300 features an auto-reverse function so you can play music in two directions. Both use 7" reels.

The A-3300SX and its reversing version, the A-3300SR, are classic heavy-duty machines designed for 10" reels.

Whichever TEAC open reel recorder you choose, you can be sure it will last a long, long time. It was designed and built that way.

### FACE IT

In the end, the cassette recorder is for those who are fonder of convenience than fidelity. If you want fidelity you can't ignore open reel.

In all crucial specifications, open reel tape recorders are better than cassette decks. And that message comes from the people who make the best of both. TEAC.



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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 slightly-curved

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.

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### Tape Talk . . .

indistinguishable "source" and "playback" of FM hiss (keeping the two signals at equal perceived loudness levels, of course) at -10 dB, and a few more join the club at a -20-dB input level. (For this test,  $3^{34}$ -ips open-reel and cassette decks, which run at  $1^{7}_{8}$  ips, should be treated the same.) In my experience. *most* cassette decks will not be able to record and play back an FM-hiss signal that is *indistinguishable* from the original at *any* input level, though the amount of high-frequency dulling on the replay signal is often so slight that you'd never notice it in anything but a direct, immediate comparison with the noise source.

Using the FM-hiss test you can obviously check a three-head deck (one with separate record and playback heads) instantaneously, always being sure to make the necessary playback-level adjustments to keep both signals at equal perceived loudness. For a deck with a combined record/playback head (a two-head machine, in other words), you will have to record half a minute or so onto the tape, rewind, and then use the amplifier's "monitor" switch to alternate between the ongoing FMhiss (source) signal and the replay of the recorded hiss (tape). Since the character of the hiss from the source won't change significantly, comparing it with the previously made recording is just as valid.

## VU or dB?

**Q.** Why are some tape decks' record meters calibrated in "VU" and others in "dB?" Aren't they the same? Also, why does the Dolby-level mark appear at different places on the meters of different decks?

> JOYCE MCLAREN Santa Clara, Calif.

Electrically speaking, a change in level A. of one volume unit (VU) is a change in level of one decibel (dB), and so long as you are dealing with steady signals like test tones it makes little difference which term is used. A VU meter, however, has very carefully controlled ballistic characteristics (how fast the needle will go from the -20 to the 0-VU mark and how much momentary "overshoot" will occur). It also has a specified impedance (3,900 ohms, plus a series resistor of 3,600 ohms), a defined scale (-20 to +3), uses a particular rectifier system (average-responding rather than peak-indicating), and so on. All of these characteristics are chosen so that every true VU meter will respond to complex signals, such as those of music and speech, in the same consistent, predictable way. The advantages of such standardization are obvious in professional applications.

Very few of the meters found in home tape decks are genuine VU meters, even if they use a VU-meter scale and have averageresponding rectifiers. As Hirsch-Houck Labs' test reports usually show, they fail to have the same ballistic response as the genuine article. A dB meter, however, need not have VU dynamic characteristics. Indeed, the usual practice is to mark the scale in decibel units if a peak-responding meter is used. (DIN, the German standards organization, has set equally well-defined characteristics for peakreading meters, but in consumer decks these, too, are often ignored.)

As for the placement of the Dolby mark on the scale of the meter face, manufacturers have considerable liberty, so long as a standard-level Dolby playback tape causes the needle to deflect to the Dolby marking. If a manufacturer is using a rather sluggish meter movement (which will understate musical signal peaks), he will probably put his "double D" symbol at +2 or +3 dB. If he's using fastacting meters, a true Dolby level (200 nano-Webers/meter) may fall at 0 dB or even below that, depending on how much "headroom" he wants to allow between a 200-nanoWeber/ meter signal level and the maximum level that can be put on the tape without causing serious distortion.

## Head-material Claims

**Q.** There seems to be quite a controversy about cassette-deck heads—ferrite, permalloy, and Sendust. Which really rate best in terms of wear and performance?

JAY N. BHOW Bombay, India

A. There is no easy answer to your question, first because there are different kinds of ferrite, of permalloy, and of Sendust (or Senalloy) materials, and second because different manufacturing techniques used to produce the materials and to construct heads from them can often have a greater influence on performance than some of the "characteristic" material differences.

With that understood, however, here are some generalizations-which may not apply in specific cases-that would probably be accepted by most head manufacturers. Of the three materials, ferrite with 650 has the highest Vickers' index of hardness (500 for Sendust, 200 for hardened permalloy, and 120 for mu-metal permalloy), making it the most wear resistant. Magnetically, however, ferrite is more prone to magnetic saturation in the presence of high bias and signal levels than either Senalloy or permalloy, and its linearity at low signal levels (as in playback) is not as good either. The low coercivity and high permeability of permalloy tend to give it the highest magnetic linearity with ferric and CrO<sub>2</sub> recording and playback signal levels. But it cannot handle as high a maximum flux density as Sendust, which presents some problems with the design of combination record-playback heads suitable for the very high recording currents likely to be required by the upcoming metal-particle tapes. Sendust will handle the highest flux densities and is nearly equivalent to ferrite in wear characteristics, but it tends to be slightly less linear at moderate signal levels than permalloy.

There are ways to get around the limitations these generalizations suggest, however. The best studio-mastering recorder I've ever used—reputedly capable of handling the enormous bias requirements of metal-particle tape—uses ferrite heads throughout; plainly, it doesn't lack for magnetic linearity. One prominent cassette-deck manufacturer uses a permalloy core material combined with a Sendust facing to take advantage of both magnetic and wear properties. Still another has produced a permalloy head with a rated life of 10,000 hours—which I suspect exceeds the motor-bearing life of most cassette decks.

## All '79 Oldsmobile Starfires come with standard sporty features you'd pay extra for in many other cars.



1. Bucket seats/2. AM radio/3. Sport mirrors/4. Console & 4-speed shifter/5. Sport wheels/6. Sport steering wheel/7. Hatchback/8. Rear stabilizer bar.



Starfire. Starfire SX. Starfire GT. Firenza. All of them give you the good stuff you see as standard equipment. And they're engineered to be exciting road cars for those who drive just for fun, as well as performance buffs. Moving down a road with precision and authority is what these cars are all about.

For power, you can take the 2.5-

litre (151 CID) 4-cylinder that's standard, or available 3.8-litre (231 CID) V6 or 5.0-litre (305 CID) V8\* A 5speed transmission is available<sup>‡</sup> too, and so are gages, tach and clock. The



decisions are yours, but one thing's for sure—if it's a sporty car you want, there's a value-packed '79 Starfire built for the way you drive. Test-drive one at your Olds dealer's.

\*Starfires have GM-built engines produced by various divisions. See your dealer for details.

<sup>†</sup>In Calif.5-speed available with 3.8-1. V6 only.



CIRCLE NO. 54 ON READER SERVICE CARD

OCTOBER 1978

11/2" Mylar® dome tweeter for extra-wide 170° high frequency dispersion.

.

JENSEN LSS

High and mid frequency controls are continuously variable to adjust response to suit any room, program material or individual taste.

Two 3<sup>1</sup>/<sub>2</sub>" midranges with individual tuned isolation chambers.

Low frequency driver with specially treated polyurethane foam suspension for lower distortion, free cone movement, and smoother response.

# An inside look at nsen's Total Energy Respon

You're looking at the heart of one of the most uniformly accurate sound reproducers made today.

Jensen Lifestyle speakers present a faithful reproduction of music, with all its complexities and tonal balances. They accurately distrib-ute this sound throughout your listening room. Which is what Total Energy Response is all about. It's the uniform radiation of sound throughout the entire listening area ... at all frequencies.

Unlike many speakers that require special on-axis listening positions-or others that bounce the sound all over your room-Lifestyle is engineered to deliver a wide spectrum of musical information through-

The Jensen dome tweeter.

A significant factor in Jensen's Total Energy Response. High frequency sound waves travel in a straight line. But the rounded shape of this element creates a sound wavefront pattern of the same shape. Thus, as these rounded sound waves travel outward from the dome, they fill the entire listening area.

out the listening area. In proper perspective. With all the depth and imaging your source material is capable of. And at real-life volume levels.

#### How does Jensen achieve Total **Energy Response?**

With a series of drivers and crossover components designed for wide dispersion and engineered to work in total unison with each other for proper stereo imaging.

In fact, for perfectly integrated speaker systems and total quality



control, we make every element that goes into the manufacture of our Lifestyle speakers. From the heavy duty magnets to our hand-wound, high power voice coils. Even the computer-designed crossover network.

At Jensen we take pride-and extra care—in producing the spe-cially designed Mylar dome tweeters that provide 170° high frequency radiation. The same goes for the polyurethane foam cone suspension woofers. And the critical midrange units with tuned isolation chambers.

But please, give a critical listen to these speakers in person. We think you'll agree, a notably superior design concept has resulted in audibly superior sound reproduction.

High energy Alnico V

damping smooths response, controls

1½" Hemispherical element.





Division of Pemcor, Inc. Schiller Park, Illinois 60176

CIRCLE NO. 38 ON READER SERVICE CARD

Compliance roll extends range of driver, controls response



## Testing Loudspeakers—Part 3

N the two issues just previous I have been discussing how Hirsch-Houck Labs does basic frequency-response and distortion tests on loudspeakers. This month I will turn to some other significant but less basic tests.

We at Hirsch-Houck Labs have ambivalent feelings about tone-burst testing. There is a certain logical appeal to driving a speaker with a transient signal of precisely repeatable characteristics and observing how the transient waveform is reproduced acoustically. (Transient waveforms bear a much closer resemblance to music waveforms than sine waves do.) The problem lies in interpreting the output waveform from the microphone, which is amplified and displayed on an oscilloscope. It usually varies widely with frequency, and its appearance may change radically with a very small frequency change (for example, a shift from 1,036 to 1,054 Hz could completely alter the shape of a tone burst). It is reasonable, therefore, to ask what significance a tone-burst waveform really has, and we are beginning to question it ourselves. In any case, it is certainly more informative to the person conducting the test than to a reader, who must judge the speaker's performance from photographs of a few selected 'typical'' bursts.

When we make this measurement ("test" is more accurate, since we do not actually "measure" anything), we generate the signal with a General Radio 1396-B tone-burst generator. It can form bursts of almost any desired length and repetition rate, and they always start in-phase from the point at which the waveform crosses the zero-voltage axis. The tone-burst signal is displayed on one channel of a dual-channel Tektronix oscilloscope, and the amplified microphone output is connected to the other channel so that they can be photographed simultaneously. The microphone is moved about, usually at a distance of several feet from the speaker and roughly on the axis of the driver whose operating frequency range includes the tone-burst frequency. The delayed sweep of the scope is used to compensate for the time it takes the acoustic waveform to travel from speaker to microphone, so that the acoustic burst and electrical burst can be displayed most clearly.

The frequency of the burst is varied over

the range from about 100 to 10,000 Hz, and we look for unusually good or bad burst patterns. We normally use a burst of four cycles, which reveals any delay in the start-up and/or ringing at the end of the burst. Long bursts, which are sometimes used by manufacturers to represent a speaker's tone-burst response, usually mask these effects. Some speaker systems give a nearly ideal burst shape at most frequencies, while others seem unable to generate a recognizable burst at *any* frequency. We select "typical" bursts, in the ranges covered by different drivers, for photographing and publication.

It's safe to say that a speaker whose toneburst response is uniformly excellent is probably a pretty good speaker and that one unable to create a recognizable burst is *not* a good speaker. But those same conclusions could also be derived from a few minutes' listening to ordinary program material. Between these extremes, we find it well-nigh impossible to draw any firm conclusions from toneburst tests. We still make this test, which is easy to perform, in the hope that it will (as it sometimes does) give us a meaningful clue to some aspect of a speaker's performance. It should not be given undue weight by the reader, however.

**D**ENSITIVITY is a speaker rating rather important to the user, and it is one of the few in which our measurements correlate fairly well with most manufacturers' ratings. It is some-

## Tested This Month

JVC JR-S501 AM/FM Receiver Sonus Gold "Blue Label" Cartridge Uni-Sync PMS-1 Metering System Audio Technology 510 Peak Display Denon DP-6000 Turntable and DA-307 Tone Arm Epicure Model 3.0 Speaker times referred to as "efficiency," but the preferred term is "sensitivity." It is usually taken to be a measure of the sound-pressure level at a distance of 1 meter from a speaker being driven by a 1-watt signal (based on the speaker's rated, or nominal, impedance). Sometimes it is expressed in terms of the power needed to produce a fixed sound-pressure level (such as 94 dB). These two forms of the rating are easily converted from one to the other because of their mathematical relationship.

Pink noise, which covers the entire audio range, is sometimes used as a test signal for sensitivity. We prefer to use an octave-wide band of noise centered at 1.000 Hz. The subjective loudness of a speaker system (which is what the sensitivity rating is all about) is more likely to be a function of its mid-range performance than of its output in the low bass or extreme treble. A sine-wave signal cannot be used for measuring sensitivity, since the combination of speaker-response irregularity and acoustical standing waves (if a "live" room is used) would make the measurement results very uncertain.

Our sensitivity measurements can be used for comparisons between speakers, although they do not really define how loud a given speaker will sound in a given room at a specified drive level. Since our measurement is made in a live room, it usually gives a sound-pressure reading 2 to 3 dB higher than the anechoic measurement used by many speaker manufacturers for *their* sensitivity ratings. This occurs because in a live room the microphone receives some reflected energy as well as direct radiation from the speaker.

To measure speaker impedance, we connect the speaker in parallel with the sweeping audio oscillator and chart recorder of our General Radio Response Plotter. The 600ohm oscillator output impedance is "loaded" by the much lower impedance of the speaker so that the actual output voltage (which is what the recorder trace shows) is a direct function of the magnitude of the speaker impedance.

First, we calibrate the system by connecting the cable that will go to the speaker to a precision decade-resistance box so that we can mark on the chart the impedance values (Continued on page 51)

# Musical Reasons have produced the Best Tapes

# DENON

# You'll Never Know Unless You LOOK AND LISTEN!

- Denon is a true "tape manufacturer", not just a packager.
- Denon developed its own formulations technology before introducing Denon tape.
- The dimensions of Denon tape engineering are:
  - Low distortion under complex musical conditions as well as test tones.
  - 2. Dynamic range in the frequency zone of dense musical content.
  - 3. "Perfect-polish" tape surfaces and foolproof transport mechanics.

## **DENON TAPE**

DX3—Super-sensitive ferric oxide that outperforms all others.
DX5—Perfect-polish ferric/cobalt that can capture and replay the dynamics of today's demanding program material.

## **DENON** Transport Excellence



\* PRECISION TAPE CONTACT POINTS



## THE PROOF



**DENON TAPES** available only from authorized American Audioport/DENON dealers.



from 1 to 100 ohms in a 1, 2, 3, 5 progression. Then we remove the cable from the resistance standard, connect it to the speaker, and make a sweep from 20 to 20,000 Hz. The result (see graph) shows the variation of impedance with frequency. It also serves to confirm or contradict the manufacturer's impedance rating. For example, the speaker whose impedance is shown carries a nominal rating of 8 ohms, but it would be more accurate to rate it at 6 ohms (the minimum impedance immediately above the bass resonance frequency is the more or less standard point at which ratings are made). However, it is not uncommon for a speaker rated at 8 ohms to measure 4 ohms or even less at some frequencies-as seen in the graph here at 1,000 Hz. This sort of thing is noted in our test reports when it occurs, since it can affect the suitability of a pair of speakers used simultaneously with some other pair driven from the same amplifier.



Next month we will conclude our discussion of speaker testing with a description of the simulated live-vs.-recorded test that we have performed for many years, a review of its advantages and disadvantages, and an explanation of why we no longer use it, plus a short description of the subjective listening criteria that we apply to speaker evaluation.

## Equipment Test Reports By Hirsch-Houck Laboratories



EADING a new line of stereo receivers FADING a new mile of start from JVC is the JR-S501, rated to deliver 120 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.03 per cent total harmonic distortion. It features a "DC" complementary-symmetry power amplifier. JVC points out that its amplifiers have fewer coupling capacitors in their signal paths than other competitive "DC" amplifiers and claims that this results in a measurable and audible advantage. (Note that so-called DC amplifiers inevitably contain at least some coupling capacitors; the question of how many there ought to be-and where-is evidently a controversial subject among amplifier designers.)

The FM tuner section of the JR-S501 has a phase-locked-loop (PLL) IC stage for its multiplex section and a pilot-signal canceler that attenuates the 19-kHz pilot signal in the audio channels with minimal loss of high-frequency response in FM reception. Instead of conventional tone controls, the JR-S501 has a "Sound Effects Amplifier" (SEA), a fiveband graphic equalizer with its control bands centered at 40, 250, 1,000, 5,000, and 15,000 Hz. This provides much greater control versatility than any conventional tone-control configuration. In the JR-S501, the SEA controls are vertical sliders at the right of the panel, each having six positions (detented) of boost and of cut, plus a detented "flat" center setting. The balance control is a horizontal slider (center detented) below the SEA controls.

The left side of the panel, like the SEA section finished in black, has the tuner dial scales and two pairs of meters. One pair is the tuning-meter section, with a relative-signalstrength indicator and a channel-center indicator. The other pair consists of the audiooutp ut meters for the two channels, calibrated logarithmically in power delivered to an 8ohm load from 0.1 to 120 watts. The legend PLL STEREO appears in red between the meter pairs when a stereo broadcast is received. Between the dial and SEA sections is a silver panel with a vertical row of five light-touch pushbutton switches. Four are program selectors—for FM, AM, phono, and auxiliary sources—and the fifth disables the FM interstation-noise muting. Below them is the horizontal tuning wheel, recessed into the panel to be fairly unobtrusive yet still readily usable.

The satin-finish silver lower portion of the panel is stepped forward from the main part of the receiver, and a row of similarly colored pushbuttons is on the horizontal top surface of the "step." These include the power switch, two speaker selectors, the low- and high-frequency filters, two tape-monitor switches, mono/stereo mode, loudness compensation, and a selector for either of two phono inputs. In addition, a DUBBING button makes it possible to dub tapes from either of two tape decks to the other. An SEA REC button increases the recording versatility of the receiver by supplying the TAPE 1 recording outputs with a signal from the output of the preamplifier, so that the program can be modified by the SEA equalizer before it is recorded. At the right of the stepped section is the horizontal volume slider. There is also a stereo-headphone jack on the front portion of the step near the power switch.

On the rear apron of the receiver are the various signal inputs and outputs (including a DIN socket duplicating the functions of the TAPE 1 circuit), plus an FM DET OUT jack for use with any future discrete four-channel FM demodulator. There are antenna inputs for 75and 300-ohm FM antennas and an AM wire antenna in addition to the hinged AM ferrite-rod antenna. Insulated spring connectors are used for the speaker outputs, and one of the two a.c. sockets is switched.

(Continued overleaf)

The cabinet of the JR-S501 is finished in a silver gray with plastic side panels. Together with the satin-aluminum front-panel trim, these contrast attractively with the black main portion of the front panel. The receiver is about 22 inches wide,  $6\frac{1}{2}$  inches high, and 17 inches deep. It weighs about 46 pounds. Price: \$699.95.

• Laboratory Measurements. A one-hour preconditioning period at one-third power output left the top of the cabinet-over the output-stage heat sinks-very hot to the touch. However, the rest of the exterior of the receiver remained cool. The IHF clipping headroom was 0.4 dB (that is, output with a steady 1,000-Hz test signal clipped at 132 watts into 8 ohms), and the IHF dynamic headroom was 1.3 dB (162 watts output with short-term test signals). The amplifier could be driven to a reference 1-watt output by 21.5 millivolts (mV) at the high-level inputs, or 0.175 mV at the phono input. The phono input overloaded at 260 mV (rated 250 mV). The Aweighted noise levels, referred to a 1-watt output with standard IHF input terminations, were almost identical for the two inputs, measuring -71 and -70 dB, respectively.

With a 1,000-Hz test signal the harmonic distortion of the JR-S501 was extremely low, measuring only 0.007 per cent up to 100 watts output, 0.009 per cent at 130 watts, and 0.13 per cent at 140 watts. The intermodulation (IM) distortion was 0.015 per cent or less from 1 to 140 watts output. The total harmonic distortion (THD) at rated power was about 0.032 per cent at 20 and 20,000 Hz, and it was under 0.01 per cent from 200 to 12,000 Hz. The residual distortion of our test-signal generator (about 0.02 per cent at 20 Hz) accounted for much of what we measured at the low frequencies. The distortion was roughly the same, or even slightly less, at reduced power outputs

The SEA tone controls provided, as expected, a near infinity of possible frequencyresponse characteristics. The loudness compensation moderately boosted both low and high frequencies as the volume setting was reduced and did not unduly color the sound. The high-frequency filter had a gradual slope of 6 dB per octave, making it relatively ineffectual as a noise filter; its -3-dB response point was at 3,000 Hz. The response with the low-frequency filter was down 4 dB at 20 Hz.

The RIAA phono equalization was accurate within  $\pm 0.5$  dB from 20 to 20,000 Hz and



changed by less than 0.5 dB when measured through the inductance of a phono cartridge. The phono-input impedance was equivalent to a 47,000-ohm resistance in parallel with a 118pF capacitor.

The FM tuner section of the JVC JR-S501 was one of the few we have seen whose 50-dB quieting sensitivity was better than its usable sensitivity (due to a very steep limiting curve). The two were, respectively, 12.8 and 13 dBf in mono. The stereo usable sensitivity was set by the switching threshold at 25 dBf, and the stereo 50-dB quieting sensitivity was 36 dBf.

The ultimate quieting at a 65-dBf input was 73 dB in mono and 70 dB in stereo, with respective distortions of 0.22 and 0.11 per cent (although most tuners have more distortion in stereo than in mono, there are exceptions, such as this one).

The stereo FM frequency response was very flat, varying only +0.6, -0.3 dB from 30 to 15,000 Hz. Nevertheless, the 19-kHz pilot carrier was reduced to -72 dB by the effective carrier-canceling circuit in the FM section. The AM rejection was 68 dB at a 65-dBf input, and the capture ratio was 1.87 dB. Image rejection was 77 dB. The alternate-channel and adjacent-channel selectivity figures were 73 and 10.7 dB, respectively.

The FM tuner's stereo separation was exceptional, exceeding 50 dB up to 2,000 Hz and gradually falling to 38 dB at 15,000 Hz. The muting and stereo thresholds were identical at

25 dBf. The tuner hum level was a low -72 dB. The AM tuner frequency response was down 6 dB at 90 and 2,800 Hz.

• Comment. The JR-S501 had no specific performance "bugs" that came to light during our tests and an extended use period. The FM muting worked positively, with a slight thump. The dial calibration on the FM band was slightly off (by as much as 200 kHz at some points), but we are sure this was merely the result of a slight misalignment. Although we have never been enamored of horizontal tuning wheels for FM receivers, the "feel" of the JVC tuning control, and its location at the bottom of the panel, made it a pleasure to use. The same comment applies to the other frontpanel controls, all of which operated with very little effort and a sense of precision that was very much in accord with the receiver's total "image."

Surprisingly, the JR-S501 does not have separate preamplifier outputs and poweramplifier inputs. However, at some sacrifice of flexibility in tape recording, the equivalent can be achieved by using the TAPE 1 outputs as the preamplifier output (with the SEA REC button depressed). This allows the flexibility of the SEA graphic equalizer to be used when driving an external power amplifier or signal processor. A return signal from a processor could, in turn, be connected to the TAPE 1 recorder-playback jacks on the receiver.

(Continued on page 54)





STEREO REVIEW

# **t'ina** Some one

People tell us blank tape has their heads reeling.

We know why. Blank tape is a jumble, presenting as many confusing options as a Chinese menu. Written in Chinese.

Sony is prepared to make order out of the chaos. And no one is more equipped. We've been making tape for 30 years. It's how Sony got started. So we know it backwards and forwards. Forward and rewind.

Right now, Sony makes 4 different blank tapes. Each has a distinct purpose. We're going to slam through the jargon, telling you clearly and specifically, which tape fills which need.

Others try to make their customers into engineers. We'd rather make our engineers talk like our customers.

## Basic Blank

The workhorse tape, technically called Low Noise— don't trouble yourself why. It's for those times when you just want to get it down.

In school, a boring lecture on "The history of the thank-you note through the ages.'

In the office, yet another budget meeting. In the car, for your cassette player. At home, for your Uncle Iggie practicing the oboe.

## **Bet**ter Blank.

While Basic Blank is primarily for speech recording, Better Blank is primarily for music. (Its technical name is Hi Fidelity, one of the few technical names to explain anything.)

Better Blank is sensitive to a wide dynamic rangewhich means the lows and the highs. It's particularly valid in the bass register-and it won't hurt too much at the cash register.

Better Blank is not Ultimate Blank, but you can still use it in a living room, concert hall, or off a record.

## Beautiful Music Blank. If you want to sound knowledgeable, call it Chromium

Dioxide. A thin coating of that substance makes this tape loyal and faithful in the high frequency range.

So piccolos will sound perfect. Lead singers, sublime. Use this tape when quality-particularly in the high range-is the highest priority.

## Best Blank.

When the object is the ultimate, and money is no object. Officially called Ferri-Chrome, this tape offers low distortion and a wide, flat frequency response.

It combines Chromium Dioxide, to pick up the highs, with Ferric Oxide-so the lows reach new heights. There is no better tape to reproduce music.

But do you need Ferri-Chrome? Some say that only the Verri-Crazy can tell the difference. But it's nice to know that the difference is there-if you have the ears to hear it.



## Basic Blank.



## Better Blank.



## **Beautiful Music Blank**.



## **Best Blank**.



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The front-panel power meters were reasonably accurate, with typical errors of 30 to 40 per cent (both read the same at all points). Since they are not measuring devices in any sense but merely indicators of the approximate power output of the receiver, this is acceptable accuracy.

The JVC JR-S501 is perhaps not quite so imposing in sheer bulk as some of the super-

power receivers currently on the market, but it is still surprisingly heavy for a unit of its size. Its power-output capability is more than adequate for any reasonable home application, and it is a solidly constructed receiver that, in our opinion, offers just about the ideal mix of tuner performance, audio power, low distortion and noise, and operating flexibility at an attractive price. We'd also like to comment on the highly successful styling refinements applied to the JR-S501. Without losing the distinctive appearance created for last year's models, JVC has introduced a freshness and a substantially enhanced functionality in the new receiver that attest to the quality of the redesign.

Circle 105 on reader service card



HE new Sonus Gold phono cartridges are a refinement of the original Sonus design using the latest materials and manufacturing techniques to improve an already fine product. They feature a newly patented stylus suspension in which the stylus pivot, made of an elastomer material designed for high compliance and linearity, is located at the dynamic center of rotation of the moving system. A high-efficiency magnetic system makes it possible to use a very small section of magnetic material in the cantilever itself for minimal effective mass. The short, rigid cantilever is designed so that the stylus tip is on the same axis as the magnetic armature, minimizing the effects of torsional resonances on the cartridge output. A more sensitive coil structure permits a significant reduction in armature mass while retaining the same output level. This, combined with a 50 per cent reduction in the weight of the diamond, results in a virtual halving of the effective mass of the moving structure-which in turn permits a redesign of the stylus suspension for greater resiliency and less damping.

As with the earlier Sonus cartridges, the Gold series consists of a single basic cartridge body with a choice of three interchangeable stylus assemblies. These are also virtually identical, differing only in the specific shapes of their diamond tips. The styli are identified by the colors of their end labels. The Blue Label has a modified line-contact stylus suitable for playing CD-4 as well as stereo records. The Red Label stylus has a conventional elliptical tip, the Green Label a spherical tip.

All three Sonus models are designed to track at forces from  $\frac{34}{14}$  to  $\frac{114}{4}$  grams ( $\frac{114}{14}$ )

grams is given as the maximum force in the sheet accompanying the cartridge). They have the same output-voltage rating of 0.8 millivolt for a velocity of 1 centimeter per second (cm/ sec) at 1,000 Hz with a  $\pm 2$ -dB tolerance in level. A hallmark of Sonus cartridges is their extremely high compliance, which is rated at  $50 \times 10^{-6}$  cm/dyne in the Gold series. The cartridge coils have a relatively low inductance, making them less critical than most in respect to load capacitance and resistance. The suggested list price of the Sonus Gold (Blue Label) cartridge is \$140. The Red Label and Green Label versions are \$125 and \$110, respectively. Replacement styli cost \$74 for the Blue Label cartridge, \$59 for the Red, and \$44 for the Green.

• Laboratory Measurements. We mounted the Sonus Gold cartridge in a good-quality integrated record player whose tone arm has an effective mass of 19.5 grams. Ideally, because of its high compliance, the cartridge should be used in a very low-mass arm, but our tests showed that it was perfectly usable in the more massive arm with no apparent ill effects.

The performance of the Sonus Gold within the audio band was measured with the CBS STR 100 test record. The cartridge load was 47,000 ohms in parallel with 170 picofarads (pF), approximately what one would encounter with most of today's low-capacitance record players. The frequency response was flat to about 10,000 Hz and rose slightly at higher frequencies to a maximum of about +3 dB at 20,000 Hz. The channel separation shown in the graph (see page 56) was measured with the CBS disc. It averaged about 18 dB at 1,000 Hz and improved to 20 to 25 dB at 10,000 Hz and 16 to 22 dB at 20,000 Hz. A recheck of separation with the JVC TRS-1005 test record gave better results: 25 to 30 dB in the midrange and 24 dB at 20,000 Hz. We also measured the effect of larger load capacitances on the cartridge's frequency response. An increase to the rated maximum of 400 pF boosted the output slightly above 6,000 Hz to a maximum of about +2.5 dB at 15,000 Hz.

Since the Blue Label is also a CD-4 cartridge, we measured its response up to 50,000 Hz with the JVC TRS-1005 record. The output rose to a maximum of  $\pm 5$  to  $\pm 7$  dB at 35,000 Hz, with an overall variation of approximately  $\pm 5$  dB up to 45,000 Hz (the rated variation is less than  $\pm 6$  dB). Separation was at least 13 to 18 dB up to 45,000 Hz.

These tests were made at a 1-gram tracking force, which we had determined was sufficient to enable the cartridge to track our highvelocity test records. Even the 300-Hz tones of the German Hi Fi Institute test record could be played at their 70-micron level at 1 gram. For those who want the ultimate in tracking ability, an increase to 1.5 grams extended the Blue Label cartridge's capability to 90 microns.

The output of the cartridge was 2.8 millivolts at 3.54 cm/sec, and the channel levels were matched within 0.6 dB. The vertical stylus angle of 30 degrees was greater than we have measured on a cartridge in recent years. Sonus informs us that the cartridges are initially assembled with a higher-than-normal vertical angle and that after a short period of use the stylus position shifts to a permanent setting of about 24 degrees. The low-frequency resonance in our tone arm was at 7 Hz with an amplitude of 6 dB. This is an acceptable resonance frequency (although near the lower limit of acceptability), and it would seem to justify our use of a "normal" tone arm for this test instead of a special and costly lowmass arm.

The intermodulation distortion, measured with the Shure TTR-102 test record, remained 3 per cent or less up to a 23-cm/sec velocity before increasing to 7 per cent at 27 cm/sec. An increase in tracking force to 1.5 grams reduced the distortion substantially, to between 1 and 2 per cent from 7 to 24.5 cm/sec and only 4 per cent at 27 cm/sec.

With the 10.8-kHz tone bursts of the Shure TTR-103 record, we found the repetition-rate distortion to be about average for a good cartridge. It increased smoothly from about 0.7 per cent at 15 cm/sec to 2.25 per cent at 30 cm/sec. The square-wave response with the CBS STR 112 record was consistent with the (Continued on page 56)

# While others are reaching for this technolog Sony brings it within vour reach.

It takes a sharpened technical sense to deliver innovation at sensible prices

Who else but Sony could manage it? We know turntables backwards and forwards. As far back as 1966, we were breaking ground: in that year, we applied a slow-speed, servo-controlled motor to turntables.

Today, we present the PS-X7, X6 and X5. Three fully automatic, direct drive turntables that are a direct challenge to the competition.

And the competition will soon find that we've got the features they don't want to face.

#### The X-tal Lock. X-act speed accuracy.

A traditional servo system doesn't serve you well enough. It can heat up, creating speed drift.

More critically, increased friction between the stylus and record during loud passages can slow the speed into a range where a conventional servo isn't sensitive enough to read. But your conventional ears can.

Sony's X-tal Lock system cannot be accused of the above. A quartz generator perfectly regulates the servo, locking in speed electronically. It's impervious to temperature, load, or voltage changes.

#### **Our brushless and slot-less** is matchless.

Sony's new motor gives brushes the brush. The ring shaped permanent magnet rotor and fixed coil elimi- name. It remains closed, protecting nate cogging. The torque is high. The rotation smooth. The start-up, quick.

#### Sony's Speed Monitoring System. Like millions of tiny State Troopers.

The X-tal Lock system is worth x-actly nothing, unless the right information is relayed to it. Our system uses a precise magnetic pulse signal, recorded on the platter's outer rim.



An 8-pole magnetic pick-up head receives it. Then transmits it to the servo electronics.

Most systems use only one pole. By using 8—and averaging them—we get above average accuracy.

#### Want functional controls? The case is closed!

Our dust cover lives down to its record and machine, allowing immediate access to controls without lifting the cover. (On the X7 and X6, the controls are touch sensitive.)

Underneath the cover, you'll find a safety clutch mechanism to protect the tone arm, should it accidentally be grabbed while in motion.

And on the X7 and X6, an optical sensing system—to automatically return the arm at record's end. (In the X7, a carbon fiber tone arm.) CIRCLE NO. 67 ON READER SERVICE CARD

These turntables are even worth more dead, than alive. Because their cabinets are made from an acoustically dead material. They won't vibrate.

Vibration is also cut by our thick rubber mat, heavy aluminum platter and viscous filled rubber feet. (The X7's mat is filled with the same damping material).

Much has been engineered into these turntables that we haven't mentioned, including lightweight tone arms with a cast aluminum alloy headshell.

So tightly built are they that we didn't even have room for bigger prices.

Cartridges are not included





In the graph at left, the upper curve represents the smoothed, averaged frequency response of the cartridge's right and left channels; the distance (calibrated in decibels) between it and the lower curve represents the separation between the two channels. The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave (see text), which indicates resonances and overall frequency response. At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and

wide frequency response of a CD-4 cartridge. It showed the record's inherent ringing at about 40,000 Hz over the entire duration of the square wave. We also found a large overshoot—about the full amplitude of the square wave—followed by ringing that decayed rapidly. This apparently results from the relatively undamped stylus resonance that occurs at about 35,000 Hz.

• Comment. The Shure "Audio Obstacle Course" records confirmed that the Sonus Gold (Blue Label) cartridge has a very high tracking ability (not surprising in view of our other measurements). The older ERA III record was played without difficulty at 1 gram except for a slight "sandpaper" quality on the fifth level of the sibilance test. Increasing the force to 1.5 grams cleared this up. The newer record, ERA IV, which has proved to be a very severe test of a cartridge's middle- and high-frequency tracking ability, was also negotiated handily at 1 gram except for the beginning of mistracking on the fifth level of the combined harp and flute section. In that case, an increase to 1.5 grams of tracking force had no significant effect.

These records represent a much more severe tracking test than almost any commercial music record we know of. When we listened to more usual recorded material with the Sonus Gold, we found it to be as smooth and free of coloration as its measurements imply; it had no particular colorations, even subtle ones, that we could find. The detection of such colorations, which are often the only differences between cartridges whose measurements are basically similar, depends to a great extent on the specific records one uses, as well as the total listening environment and



TTR-103 test records. These high velocities provide a severe test of a phono cartridge's performance. The intermodulation-distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum velocity the cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals with recorded velocities much higher than about 15 cm/sec.

one's personal taste. To our ears, this is as flat and clean a cartridge as we have heard.

Aside from such purely personal reactions, we must point out that the Sonus cartridge is very tolerant of load conditions. Load resistances of 40,000 to 100,000 ohms and almost any capacitance up to 400 pF have only the slightest effect on its performance. For the same reason (a very low coil inductance of 150 millihenries, compared with 500 to 1,000 millihenries for most cartridges), it is less likely than most cartridges to interact with a preamplifier's equalizing circuits. It would seem that Sonus has made what is very nearly a universally applicable top-quality cartridge, with unusual freedom from requirements for any special interfacing with the rest of the system.

Circle 106 on reader service card



THE Uni-Sync PMS-1 Professional Metering System is a peak-responding level indicator suitable for connection to any audio amplifier in a home or professional sound system. The PMS-1 is a stereo device whose two completely independent channels have "floating" grounds so that there is no danger of creating ground-loop hum when connecting it to a system and no possibility of trouble from incorrect polarity. The 72,000-ohm input impedance of each channel will not load any circuit to which it is connected.

The front-panel indicators are two rows of colored LED's. When the power is turned on, the first light for each channel (marked READY) comes on in green. Proceeding outward from that point, there are green LED's at each 10 per cent interval from 10 to 50 per cent of maximum, amber LED's at 60, 70, and 80 per cent, and red LED's at 90 and 100 per

cent. And one final red light is marked PEAK. In the rear of the PMS-1 are two pairs of heavy-duty, five-way binding posts for connection to the amplifier outputs, a line fuse, and a horizontal-slider calibration control that adjusts the sensitivity of the display, setting both channels simultaneously. (Its scale is calibrated from 2 to 200 watts, with intermediate calibrations at levels of 5, 20, 50, 100, and 175 watts.)

There are three methods of calibrating the PMS-1 for any given audio system. The calibration control can simply be set to the rated power output of the amplifier. Alternatively, the maximum signal level can be applied to it and the control adjusted until the 100 per cent light flashes. Finally, the most accurate method of adjusting the PMS-1 is to observe the amplifier output on an oscilloscope and adjust the calibration control so that the 100 per cent light comes on just as the amplifier output begins to clip. (Continued on page 58)

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• Head Cleaning Kit: specially-engineered for more occasional, full-scale maintenance, featuring non-toxic aerosol cleaning agent, and brush, inspection mirror and cleaning probes.

Plus of course, our elegant CP-36 Deluxe Cassette Storage Cabinet, 7 and 10-inch metal CCCSSORIES HEAD ID-OI DEMAGNETIZER DOI DEMAGNETIZER DOI DEMAGNETIZER

and 10-inch plastic take-up reels, and head cleaner cassette. We've offered the state of the art in cassettes for 10 years. The new TDK necessities will help you get the high level of performance and enjoyment from your tape, deck and music that you've come to expect over that time...for some time to come.

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The Machine for your Machine®

The Uni-Sync PMS-1 is compact and designed for rack mounting. It can be powered from a 115- or 230-volt a.c. line. Its black front panel is 19 inches wide and 134 inches high, and the unit is 5 inches deep. Weight is 6 pounds. Price: \$149.

• Laboratory Measurements: Although the calibration-control markings are in terms of watts, the percentage markings on the LED's actually refer to voltage levels. This distinction is not sufficiently emphasized in the instruction sheet accompanying the unit—in fact, it is not mentioned at all.

We connected the Uni-Sync PMS-1 to the output of an audio-signal generator, monitoring the applied voltage on an accurate a.c. voltmeter. Both channels were driven simultaneously. We first verified that they had identical sensitivities for all settings of the calibration control. Then, setting the control in turn to each of its calibrated marks, we measured the 1,000-Hz input voltage required to make the 100 per cent light come on and converted this to the equivalent power into an 8-ohm load. The typical error in the LED readout display was less than  $\pm 15$  per cent, which is quite acceptable for a monitoring device such as this, considering its likely applications.

The control was then set so that the 100 per cent light came on with exactly 10 volts applied at 1,000 Hz, and the voltage calibration of each of the LED's was checked. The error, as a percentage of the total "full-scale" reading, increased smoothly from one or two per cent at the upper end of the range to 10 per cent at the lowest reading (where it amounted to 100 per cent of the reading). The PEAK light came on at 10.7 volts, a mere 0.6 dB above the 100 per cent level.

We checked the frequency response of the PMS-1, starting with 10 volts of 1,000-Hz input giving a 100 per cent indication. There was no change in sensitivity down to 50 Hz, and at 20 Hz a 9.4-volt input was sufficient for a 100 per cent indication. At the high frequencies the sensitivity dropped slightly, and an input of 10.9 volts was required at 20,000 Hz.

The final test of the response time was made with a tone-burst signal of adjustable duration. The continuous signal was adjusted to give a 100 per cent reading. An input duration of at least 15 to 20 milliseconds was needed in order to obtain a true level reading. A 4millisecond burst read 60 to 70 per cent of its actual level, and a 1-millisecond signal indicated only 40 per cent. Although this was not quite as fast as some peak indicators we have seen, it would appear to meet most requirements for audio-peak monitoring.

• **Comment.** The electrical performance of the Uni-Sync PMS-1 appeared to be quite satisfactory for its intended purpose, and the device can be connected without difficulty to an amplifier of almost any power rating.

Unfortunately, the choice of linear calibration intervals implies a limited dynamic range. On ordinary (uncompressed) music, for example, the 10 per cent light will rarely flash at a level setting that may cause the 100 per cent light to flash on an occasional peak. The lack of a logarithmic (decibel) response characteristic thus somewhat limits the value of this unit in a home music system. In those professional performing applications where hard rock music (or other material) with a limited dynamic range is involved, the PMS-1 would undoubtedly be more effective.

Circle 107 on reader service card



THE Audio Technology Model 510 is a compact peak-responding level indicator that uses two parallel rows of LED's to monitor and display the instantaneous program levels in two audio channels. It has a 45-dB display dynamic range, with the sixteen LED's in each channel being turned on at level increments of 1 to 6 dB. Around 0 dB (the maximum reading is +6 dB), the lights are spaced at 1-dB increments, and the intervals open up to 3 dB and 6 dB near the lower end of the scale. On the front panel there is also a pushbutton that changes the operating mode from a low-level line monitor with a 0-dB sensitivity adjustable from 50 millivolts to 5 volts (dBm setting) to a power monitor covering a range from 0.003 to 400 watts (dBw setting).

In the rear are separate inputs for the two operating modes—screw terminals for the speaker inputs and phono jacks for the line inputs. A control next to each of the latter changes its sensitivity over a wide range. Above the power-reading input terminals are two small, three-position slide switches for setting the nominal 0-dB display sensitivity to 25, 50, or 100 watts and for correcting the wattage calibrations for nominal system impedances of 4, 8, and 16 ohms. The input impedance of the Model 510 is greater than 10,000 ohms, and it will not load the circuits to which it is normally connected. Above the line cord (the unit is powered from the 120volt a.c. line, from which it draws less than 10 watts) is a three-position slide switch that controls the power to the Model 510 and supplies an internal 60-Hz calibration signal at a +4-dBm level (1.22 volts) to both line inputs.

The Model 510 has a very fast response time (rated at less than 50 microseconds for a 20-dB level rise to 750 microseconds for a full 45-dB rise), and a slower decay time that takes from 300 to 650 milliseconds for the same level changes. This enables its LED's to show very fast transients with an accuracy of  $\pm 0.25$  dB over the full 20- to 20,000-Hz audio range.

The dual inputs of the Model 510 enable it to monitor levels in different parts of a music system. For instance, the line inputs can be connected to the outputs of a tape recorder and the power terminals to the speaker outputs of the amplifier. The front-panel button on the Model 510 can be used to switch between monitoring either power output or a low-level signal at any time.

The Audio Technology Model 510 is  $7\frac{1}{2}$  inches wide,  $1\frac{3}{4}$  inches high, and  $5\frac{1}{2}$  inches deep. It weighs 2.2 pounds. Price: \$129.95.

• Laboratory Measurements. Our measurements on the Audio Technology Model 510 consisted principally of confirming the detailed final test data sheet that accompanied our test sample. For all practical purposes, our measurements were in complete agreement with the manufacturer's. The overall range of the display was 44.75 dB, and each display step was within 0.25 dB of the indicated value. The internal calibration signal was at +5 dBm instead of +4 dBm. The frequency response was within  $\pm 1$  dB from 5 to beyond 20,000 Hz, and it was down 3 dB at 120 kHz. At maximum line-level input sensitivity, a 0.42-millivolt signal at 1,000 Hz gave the lowest reading (-39 dB), and 36 millivolts was needed for a 0-dB reading. In the power-level mode, a 9.6-volt input lit the 0-dB light with the 25-watt and 4-ohm settings (10 volts would be the ideal reading for that condition). The display changes for the different power and speaker-impedance switch settings were exactly as specified (3 dB per step of change).

To check the response time of the display, we drove the line input with a 10,000-Hz tone-(Continued on page 60)

Soundcraftsmen equalizers





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#### **SE450 SPECIFICATIONS**

SIGNAL-TO-NOISE: 105dB below full output. INDIVIDUAL CONTROLS: 32dB total adjustment range. a. ±16dB each octave (all other octaves set at max.) b. ±12dB each octave (all other octaves set at zero) TOTAL GAIN/CUT: +22dB, -28dB, all controls set at maximum. THD: Less than 0.01% at 2V.



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Porticial indicators and speaker protection. 250 watts RMS minimum p/c 20-20KHz @ 8 chms, less than 0.1% THD. T.I.M. better than 0.02%. Slew rate better than 50V per micro-second.

#### **D** PE2217-R EQ SECTION

A stereo ten-octave Graphic Equalizer complete with zero-gain level controls, visual level monitoring through L.E.D.'s, the ability to pre-equalize tape recordings tape monitor facilities, front panel equalizer switching and our exclusive Instructional Test Record and Computane Charts. Signal-to-noise better than 106dB down,  $\pm 12$ dB per octave (typ.  $\pm 14$ dB), total gain/cut capability  $\pm 30$ dB, -36dB.

#### **2** PE2217-R PRE-AMP SECTION

Two independent discrete phono preamplifiers. Tape dubbing between two or three recorders with optional simultaneous equalizing and monitoring. Front panel tape input-output jacks. Double-dubbing into two recorders simultaneously. Two stereo headphone jacks. 84dB S/N and .01% distortion. Includes walnut-grained sculptured side panels, removable for 19" rack mounting. CIRCLE NO. 68 ON READER SERVICE CARD

Manufactured in California, U.S.A. by Soundcraftsmen, 1721 Newport Circle, Santa Ana, CA 92705

burst signal, using a very short duty cycle of one burst each half second. When the level was set to give a 0-dB indication on a continuous signal, it read -1 dB on a 1-millisecond burst and -6 dB on a 0.1-millisecond burst (which was only one cycle of the 10,000-Hz tone). Using a -21-dB signal as a reference level to check the response time over a reduced dynamic range, we found that a 1-millisecond pulse read 0 dB and a 0.1-millisecond pulse read -6 dB.

• Comment. Our preliminary examination and bench tests of the Audio Technology Model 510 left us with a very favorable impression of its design, construction, and performance. Connecting it to the speakers of a music system did nothing to lessen that impression. The 45-dB dynamic range was sufficient to give a continuous visual display of program levels, and the fast response/slow decay of the display let it follow brief program peaks while continuing to show the long-term average output (in the form of the continuously lit LED's at lower levels). Its operating speed was dramatically demonstrated to us by its vivid response to a power-line transient from an airconditioner compressor. At the low listening level we were using (the -33- and -39-dB lights on the Model 510 were the only ones energized by the program) we heard nothing from the line transient, yet it lit up about half the LED's on the display for a fraction of a second!

In its standard form the Model 510 is small enough to fit almost anywhere in or around a

music system or to be built into rack panel or console for professional applications. Other variations are available, including a verticalreading front panel, solid-oak end panels, and single- and double-instrument rack-mount panels, which can be ordered from Audio Technology, 1169SR Tower Road, Schaumburg, Illinois 60195. A model with red, green, and yellow LED's will be available shortly.

Anyone who, for any reason, would like to know the absolute peak operating levels in his system or who wishes to monitor the dynamic program variations accurately while listening or recording will find the Audio Technology Model 510 to be an invaluable accessory at a surprisingly modest price.

Circle 108 on reader service card



DENON high-fidelity components are manufactured by Nippon Columbia and distributed in the U.S. by American Audioport, Inc. Denon's finest turntable is the DP-6000, a quartz-locked, direct-drive, two-speed unit that is available either unmounted or as a part of the DP-6700 record-playing system, in which it is installed with a Denon DA-307 tone arm (also available separately) on a special heavy, isolating base.

The DP-6000 has a full-size, 4-pound, diecast aluminum-alloy platter driven by a servocontrolled a.c. motor at either 33½ or 45 rpm. The speed is normally locked to a highly stable frequency derived from a quartz-crystal oscillator. The servo feedback is obtained from a ring of magnetic material coated on the inside rim of the platter and containing 1,000 recorded pulses. A pickup head, resembling the head of a cassette deck, senses the pulses as the platter rotates and compares their frequency to the reference signal derived from the crystal oscillator. Any rotational deviation, even one occurring as a phase shift, causes a correcting signal to be applied to the drive motor.

The platter is almost entirely above the motorboard, but it is surrounded by a beveled ring that conceals the strobe markings on the rim of the platter. These are lit by a neon lamp within the beveled housing; its light flashes are derived from the control frequency rather than from the commercial power line. This allows a single row of marks to be used for indicating both speeds. The stroboscope can be viewed through a window in the beveled ring.

The operating controls of the record player are also on the beveled surface. They include a pushbutton power switch and four momentary-contact pushbuttons for selecting the operating speed and starting or stopping the motor. The button whose function has been selected is back-lit to show the operating status of the turntable. A small pushbutton converts the turntable-speed control from the quartz reference signal to a conventional vernieradjustable direct-drive system. A knurled wheel under the strobe window varies the speed over a nominal  $\pm 6$  per cent in the variable operating mode.

The Denon DA-307 is, at first glance, a simple tubular S-shaped arm with a rather long rear-counterweight extension and two black metal base extensions that contain the arm lift (cueing) and antiskating mechanisms. Close examination shows that the arm is much more sophisticated than it at first appears. Denon engineers have given much thought to the ways in which unwanted vibration can reach the record-playing system and interfere with correct reproduction. One of these paths is through the arm base and pivots. To prevent vibration from reaching the pickup through this route, the arm tube is decoupled from the pivoted counterweight section, forward of the pivots, by a rubber damping section. The two sections of the arm are connected by a single wire that positions them accurately and controls the tension of the coupling between the sections. According to Denon, this feature greatly reduces transmission of acoustic energy to the pickup through the arm base.

The tracking force is set by a rotating counterweight with a scale calibrated from 0 to 2.5 grams at 0.1-gram intervals. Antiskating com-(Continued on page 62)

# 30

The last word in the ongoing dialogue between musical art and the state of the art. A loudspeaker creation from Epicure representing over 2½ years of development that will significantly influence the design of dynamic loudspeakers for years to come. The 3.0 is priced at about \$500 per speaker and can now be experienced at select audio stores everywhere.



pensation is supplied by a noncontacting magnetic system that reduces the antiskating torque as the arm travels toward the center of the record (where the frictional forces that produce the skating effect are claimed to be less). The antiskating knob can be adjusted while a record is being played, since it is mounted on an extension of the arm base rather than on the arm itself. Pulling out the knob separates the magnets and disables the antiskating system.

The cueing lift is oil-damped for both directions of arm movement, and the lift lever is located near the front of the arm for easy handling. The headshell, of the familiar four-pin plug-in type, is made of a magnesium alloy said to be much lighter and more rigid than the more commonly used aluminum. The connection terminals in the tone arm and the phono plugs on the special low-capacitance cable supplied with the arm are gold-plated for low contact resistance and oxidation inhibition.

In the DP-6700 system (which does not include a cartridge), the DP-6000 turntable and DA-307 tone arm are mounted on a very heavy laminated wood base covered in brown leather-like vinyl and supported by four spring-mounted feet whose heights are individually adjustable for leveling the turntable. The hinged, tinted plastic dust cover remains open at any intermediate angle and has convenient metal finger lifts in its sides. The Denon DP-6700 system is large as well as heavy, with approximate overall dimensions of 20% x 75% x 16½ inches with the cover closed. It weighs about  $37\frac{1}{2}$  pounds. Price: \$1,060.

● Laboratory Measurements. The Denon DP-6700 record-player system was tested with a Denon 103D moving-coil cartridge installed in its arm and an external Denon HA-1000 head amplifier (pre-preamplifier). The flutter and rumble specifications of the DP-6000 turntable are far better than those of any test record we know of, so we had no expectation of matching the 0.015 per cent wrms flutter rating (and we do not use the DIN B weighting that was the basis for the -77-dB rumble specification). However, we did measure a weighted rms flutter of 0.045 per cent and a weighted peak (DIN) flutter of  $\pm 0.07$ per cent. Both figures represent excellent performance by any standards. The unweighted rumble was -32 dB, including both vertical and lateral components, and -37 dB with vertical rumble canceled. With ARLL weighting, the figure improved to -59 dB, a good figure though not quite the best we have measured. Both the flutter rate and the predominant rumble energy were in the 5- to 10-Hz range.

Real Rolling Contraction

States and service

In general, the turntable performance was fully comparable to that of the better directdrive units we have tested, being neither better nor worse in any significant respect. The speed, according to the crystal-controlled reference oscillator in our Meguro flutter meter, was 0.02 per cent fast, a completely negligible error. The vernier speed adjustment had a range of +11 to -8.5 per cent, and the speed did not change detectably, in either the fixed or variable mode, when we varied the a.c. line voltage from 95 to 140 volts. From a standing start, the turntable required 1 to 2 seconds to reach operating speed. It could be switched between its two speeds more quickly, taking less than 1 second to go from 331/3 to 45 rpm and roughly 1 second to go back.

Although we could not measure the tonearm bearing friction directly, the arm's tendency to balance unambiguously and float freely in any balance condition was indicative of very low friction. The actual tracking force was within 0.02 gram of the indicated value. The tone-arm tracking error was about as low as can be measured visually with a stylus protractor, on average less than 0.3 degree per inch of radius, reaching a maximum of 0.4 degree per inch at a 6-inch radius.

The effective arm mass (less cartridge) was only 14 grams. Though not quite as light as some specially designed low-mass arms, the DA-307 is substantially less massive than most current record-player tone arms. Since the arm was intended to operate compatibly with the relatively low compliance of the Denon 103 series cartridges, its mass could not have been further reduced without placing the



. . . However, if you're looking for something a little better than state-of-the-art.

resonance in the audio range. In our tests with the 103D cartridge the combination resonated at a nearly ideal 9 Hz with an amplitude of about 6.5 dB.

The antiskating had to be set about 1 gram higher than the tracking force for optimum correction. This is a very noncritical adjustment, especially with the Denon 103D cartridge, which has excellent tracking ability. The cueing device produced absolutely no lateral arm drift, returning the pickup to the same groove it had left even when we used the maximum available antiskating torque. The capacitance of the arm and signal wiring was exceptionally low, only 61 pF (picofarads) per channel to ground and 3 pF between channels.

Since it was evident that Denon had used the combination of a heavy base and softly sprung feet to isolate the system from conducted vibration, we expected the base isolation to be very good. Nevertheless, we were surprised to find out just how good it was. Unequivocally, the Denon DP-6700 had better base isolation against conducted vibration in the audio range than any other direct-drive record player we have ever tested. In fact, its margin of superiority was typically 20 to 40 dB, and often much more. Only one belt-driven turntable we have tested could match the DP-6700 in its immunity to feedback from conducted vibration, and that also was a large, heavy, and expensive unit.

• Comment. Our comments on the Denon DP-6700 system must necessarily skirt the question of "how it sounds," since we are not reviewing the cartridge, which is mainly responsible for the audible output of a recordplaying system (for the record-pun intentional-it sounded very, very good). More to the point is that so many things about the DP-6700 have been properly executed and so few have been overlooked or done incorrectly. As a matter of fact, we could find nothing about it that we did not like except, perhaps, its large size, which may complicate installation in some cases. Most of the things that impressed us are so obvious that it is hard to understand why every record player does not have them. The DA-307 tone arm has the finest manual cueing-lift device we have had the pleasure of using, with zero arm drift under any conditions (all that this requires is a high-friction surface on the lift bar to contact the arm tube and prevent slippage between them, a fact which seems to have escaped the notice of most record-player designers). Moreover, it is simple and straightforward to set up and adjust; one does not need an external stylus-force gauge or tracking-error protractor to be certain of getting optimum performance. The mounting for the DA-6000 turntable not only isolates it effectively against audio-frequency vibration and acoustic feedback, but is surprisingly effective at infrasonic frequencies. In other words, the DP-6700 is an impressively stable unit under any practical home-use conditions and does not have to be handled with undue delicacy to avoid jarring the pickup.

We could probably go on indefinitely, but the point should be clear by now. Denon has made a record player that shows full evidence of thoroughness and care in its design and construction. We would be willing to bet that the engineers who designed it actually used it to play records, and in the process weeded (Continued on page 64)

## lo beat the other our arm r.

SFEED CONTROL SERVO-CIRCUTRY

TONEARM MOTOR

The new Sanyo TP1030 may look like other direct drive turntables.

But it plays like no other you can buy. Because of a great arm. With a little muscle of its own.

The arm. The TP1030's low mass tonearm says "precision" from its rugged, light-alloy headshell to

the micrometer-adjustable stylus force gauge. We counterbalanced it laterally, as well as vertica I. The counterweight is heavier, and located closer to the pivot to reduce rotational inertia. The arm, with its anti-skating mechanism, rdes in a bearing assembly that's virtually frictionless to provide sucerior tracking response.

The muscle. Most automatic turntables use a complicated linkage of gears, cams, and evers that "steal" power from the platter in order to operate the tonearm mechanism. While this arrangement works, it's far from ideal. So we gave the TP-C3D a separate little DC motor and precision gear train just to cperate the tonearm. No linkages to add Fiction or mass to the tonearm assembly. No signifing of sound when you reject a record as the shock load of the arm mechanism hits the drive

motor. Instead the tonearm is picked up, cositioned, and set cown more gently than vou've ever seen.

The rest. The TF1030's platter motor is special, too. It's an ID-controlled, direct crive servomotor that turns in incredible C.03% wow & flutter and -70dB rumble specs. And, of course.

the TP1030 offers electronic speec change with a built-in, strobe and independently adjustable pitch on 33 and 45 rpm. Plus programmable operation that lets you choose automatic play of a single record, or automatic continuous repeat. Add other nice touches like complete LED status indication, a builtin sty us examination mirror, a base of real wood, and dust cover, and you might think this sophisticated turntable is out of your reach.

The price. Surprise! The cost of this superb high fidelity component s just \$170\* ... which makes it the real value winner in celuxe lurntab es today

See the TP103C and also what's new in Sanyo receivers and cassette tace decks at a nearby Sanzo audio component dealer.

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out the kind of minor, irritating "bugs" that so often mar one's enjoyment of a product whose performance is otherwise satisfactory.

The Denon DP-6700 is a very expensive record player. Our experience with it suggests that its price is well justified. It probably won't sound any different from another much less expensive record player (using the same cartridge, of course), so long as you are only a listener and do not handle it yourself. When you do handle the tone arm and the other controls and feel for yourself how "right" everything is about this unit, even the sound may seem enhanced. This is a product made for audiophiles who can afford to indulge themselves with an exceptional product—one that was not built down to a price. The same, equally valid justification accounts for the continuing appeal of Porsche and Mercedes-Benz automobiles. A lesser product may also "do the job," but you can be sure that the experience of using it is just not the same.

Circle 109 on reader service card



**T**<sub>HE</sub> floor-standing Model 3.0 is Epicure's finest speaker system. The design goals were: flat response over a wide bandwidth, wide dispersion, low distortion, and excellent transient response. While few would dispute that these qualities are necessary for any really fine speaker system, the manner in which the Epicure engineers set out to achieve them is somewhat unconventional.

The rounded-edge, truncated-pyramid shape of the Model 3.0 resulted from the designers' decision that low time-delay distortion (that is, phase linearity) was a necessary prerequisite for the type of transient response they were seeking. Their studies convinced them that reflections from the edges of both conventional and "stepped" cabinets were major contributors to the "time-smear" effect they wished to eliminate. The 3.0's cabinet is free of the discontinuities that, in EPI's view, often negate the benefits of special physical driver arrangements. The enclosure was also designed to minimize cabinet surfaces around each driver so as to make it relatively "invisible" at the corresponding acoustic wavelengths. The shape of the cabinet places the drivers effectively in a single vertical line, achieving phase alignment without a stepped cabinet and the problems it is said to cause. In addition, the rounded edges of the cabinet further reduce the reflections that can take

place when sound waves impinge on sharp edges.

The 10-inch acoustic-suspension woofer, which operates up to about 400 Hz, occupies the lower portion of the pyramid, a volume of about 2 cubic feet. The cone center is about 22 inches above the floor. Above it, in a separate sealed section of the cabinet, is the 6inch-cone mid-range driver, which operates up to 2,600 Hz. In selecting a relatively large cone driver to cover the mid-range, Epicure departed from the general practice among speaker designers, many of whom prefer to use domes or small cones. These require either a relatively high crossover frequency or steep cutoff slopes if the system is to have a large power-handling capacity. The Model 3.0's mid-range driver operates as a small acoustic-suspension system with a low-frequency limit of about 75 Hz, which permits the mid-range output to roll off mechanically at a 6-dB-per-octave rate. The woofer's high-frequency response is rolled off by a network at a 12-dB-per-octave rate.

The tweeter of the Epicure 3.0 is a 34-inch inverted-dome type, mounted in its own miniature enclosure (about 2 inches in diameter) at the top of the pyramidal cabinet. It is covered by an acoustically transparent, black foam-plastic cap that matches the grilles over the other drivers. The crossover between the mid-range driver and the high-frequency driver is at 2,600 Hz, with a slope of 18 dB per octave. Ferrofluid is used in the magnetic gaps of these drivers, both to damp resonances and to conduct heat away from their voice coils (thus improving their power-handling ability).

Space unfortunately does not permit a full discussion of the many novel and interesting features of the Epicure 3.0 system. A few, however, are worth mentioning. The nominal 4-ohm impedance has been designed to be as nearly resistive (uniform with frequency) as possible. The dispersion of the system at high frequencies is unusually good, as evidenced by the specification that the response from 32 to 10,000 Hz varies only  $\pm 3$  dB over a 180degree angle in front of the speaker (in the horizontal plane), while from 10,000 to 18,000 Hz the variation is only  $\pm 4 \text{ dB}$  over the same angle. The speaker efficiency is fairly low, but it can be driven satisfactorily by amplifiers rated to deliver from 30 to 100 watts per channel continuous output (the speaker will withstand peaks up to 500 watts).

The Epicure 3.0 is 413⁄k inches high and  $161/_2$ inches square at the base, tapering to  $81/_2$ inches square at the top. It weighs 87 pounds. The wood cabinet is finished on all four sides in oiled walnut, with the two black foam grilles on the front and the "cap" on top over the tweeter. Production models have a threeposition high-frequency-level switch next to the tweeter, but our test sample lacked this feature. The connection terminals are underneath the enclosure. Price: \$575.

● Laboratory Measurements. The Epicure Model 3.0's overall frequency response, combining the semi-reverberant listening-room measurements and a close-miked woofer measurement, was flat within ±3 dB from 25 to 20,000 Hz. Considering the totally different conditions under which our data were obtained, the agreement with Epicure's rating of 32 to 20,000 Hz ±3 dB was gratifying.

Although we did not carry our measurements beyond 20,000 Hz, the output was rising as we approached that frequency. The only departure from "flatness" that we could see in the composite frequency-response curve was a depression, averaging only about 2.5 dB in amplitude, between 400 and 5,000 Hz. However, the reverberant measurement as we make it is not really precise enough to establish the "reality" of that small deviation.

There was no doubt, however, about the high-frequency dispersion of the Model 3.0. In our measurements it was indistinguishable from that of any of the "omnidirectional" speakers we have tested. There was essentially no difference between the response curves (Continued on page 66)

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OCTOBER 1978

measured on axis and about 30 degrees off axis all the way up to 18,000 Hz and beyond.

Although tone-burst tests are, at best, a crude indication of a speaker's transientresponse properties, the bursts we measured from the Epicure 3.0 were very good at all frequencies, including the crossover regions. The speaker sensitivity was fairly low, as one would expect from any acoustic-suspension system, so a 2.8-volt input of random noise in the 1,000-Hz octave produced an 84-dB sound-pressure level (SPL) 1 meter from the grille. This corresponds to 2 watts into the speaker's nominal 4-ohm impedance. As we have pointed out in the past, this is not an efficiency rating, but rather a measure of how loud a sound the speaker will produce for a given drive voltage.

Epicure's emphasis on low distortion has borne fruit, as shown by the bass-distortion measurements we made. At 1 watt (2 volts) input, the total harmonic distortion (THD) was well under 0.2 per cent at 100 Hz and increased very slowly with decreasing frequency to 0.45 per cent at 50 Hz and 0.75 per cent at 40 Hz. Even in the deep bass the woofer maintained its linearity; the distortion was a mere 2.2 per cent at 30 Hz and 5 per cent at 20 Hz. With a 10-watt input, the increase of distortion was slight, reaching 2.2 per cent at 35 Hz and 8.9 per cent at 20 Hz.

The impedance curve, except for a rise to about 25 ohms at the woofer resonance of 33 Hz, was at or near 4 ohms from 100 to 10,000 Hz and rose to about 7 ohms at 20,000 Hz. Clearly, this speaker will not present any unusual load conditions to any amplifier—for all practical purposes, its impedance is equivalent to the resistive load normally used when testing amplifiers.

• Comment. The Epicure 3.0 has a distinctive sound character, and we spent hours listening to it and comparing it with other speakers in an effort to isolate and identify its special quality. What we heard was only partially explainable in terms of frequency response, which *can* account for the overall smoothness and a balanced sound that never screamed or honked, thudded or boomed. This is a "flat" speaker, to the extent that any speaker can be so described, and it does not emphasize or diminish any part of the audio-frequency spectrum. Still, we have heard other speakers that measured as flat or flatter, and they did not sound like this one.

The 3.0 is meant to be used free-standing, without reinforcement from room boundaries (although some interaction with the floor is probably unavoidable). Knowing the bass response, we were surprised how little apparent bass the Model 3.0 had-until such sounds as the drums in Stravinsky's Firebird made it plain that the speaker could deliver whatever the program called for with no strain whatever (we measured 200-watt peaks into the speakers on those drum beats!). The apparent lack of bass on ordinary program material indicates an absence of boom or artificial coloration in the upper bass, and this is one feature that sets this speaker aside from many others.

We suspect that the directional properties of the Epicure 3.0 (or, more accurately, the lack of directional properties) had the most to do with its sound quality. The speakers had a diffuse, blended sound that filled a hypothetical stage at the end of the room. This was strikingly obvious when we switched to other, conventional bookshelf speakers on that same wall, not far from the 3.0's. These speakers had an octave-to-octave sound balance and general sound quality not unlike those of the Epicure 3.0. Although the frequency response did not change much when we switched, the entire spatial distribution of the program did. The bookshelf speakers sounded like a pair of good compact speakers (which they were), but the Epicure 3.0's unmistakably opened up the end of the room, providing a sense of depth and ambiance similar to the effect of a good time-delay enhancement system. In fact, when we first listened to the 3.0's and noted this quality, we realized that our own time-delay system was operating (this is not desirable when one is trying to judge speaker quality critically). When we shut it off, the change in spatial distribution was remarkably



The excellent tone-burst response of the Epicure 3.0 at (top to bottom) 100, 1,000, and 10,000 Hz. The upper traces in each photo are the inputs.



"I found out why your tropical fish keep dying. You plugged the air pump into the 'switched' receptacle."

small, almost as though the 3.0's were duplicating some of the effect of the delay system, though only in the front of the room.

This diffuse, open sound quality had no negative effect on stereo perspective. Quite the contrary: the Epicure 3.0 has an exceptionally well-defined "stereo image." We normally do not use that overworked and overemphasized expression, but this speaker really can position specific sounds in definite locations. We do not find this effect very often in live music, but it is certainly highly regarded by many audiophiles. For those who especially prize it, the Epicure 3.0 has this quality in full measure.

The Epicure 3.0 is not inexpensive, but it is very handsome and not so large that it is visually overpowering in normal-size rooms. The need to install the speakers well away from the walls should pose no aesthetic problems, since their shape is fundamentally that of a stable, free-standing structure and they look very much "at home" when so placed. The Epicure 3.0 is a very respectable entry into the ranks of top-quality speakers.

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## The Pop Beat

By Paulette Weiss



#### WOMEN IN MUSIC

MAYBE it started the day primitive man first noticed that his mate's voice was different and, well . . . *interesting*. "Hey, that kid can *sing*!" he may have said in surprise. Perhaps he permitted her to join in post-hunt chants and such. From that day on, a career in music has been more acceptable than most others for a woman considering (gasp! shudder!) a professional career at all.

Someday, if all goes well, a study of "women in music" will be about as pertinent as one of vegetarians or short people in the same field; sure, all three have idiosyncrasies, but when it comes down to making music, will that really matter? For now, irrelevant differences between men and women still matter enough that some institutions have had to devise interesting methods of protecting women (and minorities) from unfair, sometimes even unconscious discrimination. For instance, one-third of all major U.S. symphony orchestras now hold behind-the-screen auditions, and a pretty face or figure can no longer influence a vote either pro or con. Not surprisingly, the percentage of female members in these orchestras has gone up dramatically. According to Symphony News magazine, there are 36 per cent more women in all U.S. symphony orchestras than there were ten years ago, and today women make up more than 40 per cent of metropolitan orchestras.

Although music has long been open to women in ways most other fields haven't, it still has its female "ghettos" with boundaries clearly marked. Women have been accepted as vocalists and as keyboardists on instruments from the harpsichord to today's piano. They've been permitted to play ladylike stringed instruments such as the lute, the harp, the violin, and the modern guitar, and even to become pop composers. (Women classical composers are not significantly better received these days than they were a hundred years ago, but then the male contingent has not been having an easy time of it lately either.)

Accepted, yes; respected, credited, paid? No, generally not, at least not until quite recently. A telling example of the pervasive neglect that has fed this situation occurred just last year when the Songwriters' Hall of Fame opened in New York: not a single woman was represented. It was certainly not a conscious expression of prejudice, but there it was. (Curator Oscar Brand was much embarrassed by the implied sexism of the omission and immediately put together an exhibit called "Here's to the Ladies" which has since been incorporated into the museum's permanent collection.) And the omission certainly couldn't be chalked up to any shortage of talented women songwriters. Both the length of the list bearing their names and the number of standards they have written doubtless come as quite a surprise. That so many of these names are totally unfamiliar is particularly disturbing; the reason is that they have simply never been properly credited. Among the unknowns are Ruth Lowe (I'll Never Smile Again, Put Your Dreams Away), Effie Canning (Rock-a-Bye Baby), Dana Suess (You Ought to Be in Pictures), Ann Ronell (Willow Weep for Me. Who's Afraid of the Big Bad Wolf), and two lyricists, Dorothy Donnelly (The Student Prince) and Rida Johnson Young (Naughty Marietta), whose major works have for years been entirely credited to their male collaborators (Sigmund Romberg and Victor Herbert, respectively).



Although women's accomplishments have been circumscribed and neglected in the past, the point of the "women in music" brouhaha is, of course, that they are at last getting *in*, not merely hovering in the doorway. Here's just a handful of the growing number of highly successful female professional songwriters: Betty Comden, Cynthia Weil, Dorothy Fields, Elizabeth Swados, Ellie Greenwich, Carolyn Leigh, Micki Grant, and Carol Hall. The writer/performers are even more numerous, so no angry letters if I've left out your favorite: Carole King, Mary Lou Williams, Judy Collins, Gretchen Cryer and Nancy Ford, Joni Mitchell, Carla Bley, Carly Simon, Alberta Hunter, Janis Ian, Joan Baez, and Carole Bayer Sager.

Female performers, moreover, are hitting the charts as never before. A special feature in Billboard called "Starwomen" recently reported that they now often command 40 per cent of the pop charts, and that magical 50 per cent share is in the offing. Steve Simels once asked in these pages if women could rock, and he answered that very question in his August interview with Patti Smith. She is one of the finest, most uncompromising rockers the genre has produced, and Grace Slick, Elkie Brooks, Stevie Nicks, and the Wilson sisters of Heart are not to be sneezed at either. Yes, but can they swing, others may ask. Stash Records' "Women in Jazz" series and Chris Albertson's review of it (page 146) provide a resoundingly affirmative answer.

OBVIOUSLY have a personal stake in women's being fully accepted in this business of music, but it must be acceptance as equals, with no condescension, no coddling. Mary Lou Williams, an outstanding jazz musician who is now a professor of music at Duke University, says it with astringent directness:

"My career has been one-nighters with men all my life. I did some starving too. Today you run into these women who insist on getting in, and they can't cut it. They never singled me out as a woman. If you're good, you'll do the work." Williams is one of the few strong enough to have blasted through the extra barriers women face in an already difficult career, but determination and aggressiveness do not necessarily go hand in hand with talent. Special privileges for women? No. Equal opportunity? Absolutely.

As the doors have opened in all areas of the music business, women have not hesitated to walk in, becoming disc jockeys, recording engineers, and producers, but it's still a struggle. Liz Saron, an engineer at Media Sound Studios, remembers a recording session with Mick Jagger: "He said he felt women have no place in the studio and should be home making quilts." Not a surprising statement coming from notoriously sexist Mick, who voiced a still unfortunately prevalent sentiment. I mean, *some* guys. . . . Women are having trouble getting into sales and attaining executive status in the music biz, but they are already doing thoroughly professional jobs as writers, photographers, and publicists. And they're getting credit for it too.

he overall prognosis for a healthy integration of the sexes in this country is good, and in the field of music it's excellent. It will take more time, of course; it's still a rather novel idea, this one of equality based on something other than mere muscle. And though it goes against habits developed over thousands of years, if we can continue to civilize each other without relapsing into old ways, women are bound to enter the mainstream of professional and creative activity. All talent is still too precious to waste.

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For complete technical information on the Model 301 speaker system, write Bose, Dept. T, The Mountain, Framingham, MA 01701.

### **Going on Record**

By James Goodfriend



#### **IRATE CONSUMERS**

**T** HE way to put the fear of God into any classical record man is to tell him that he has a three o'clock appointment with an irate consumer. It isn't that he fears a fight. There is no reason for a fight, for the chances are that he will agree with the irate consumer on whatever there is to be irate about. The fear comes in because, whatever the complaint may be, he knows he probably won't be able to do much about it.

I except from the possible complaints all matters of opinion: that this conductor's Beethoven is better than that conductor's Beethoven; that this tenor was better suited to the role than that tenor; that the proper way to record such and such a group is 'way back and with plenty of room ambiance rather than close up and detailed. I also except those matters beyond anyone's control: that this orchestra is under contract to another company; that that soloist was booked solid so far in advance that it was impossible to include him in the project; and so forth. What is left is a problem profile delineated by a number of legitimate complaints, many of them small, that somehow show the classical record business to be a microcosm of the advanced technological society that somewhere along the line slipped its reins and has gotten away from all of us.

Record companies are of two types: too large and too small. There are certain difficulties that they share and others that are specific to each of them. The individual difficulties are these: the too-small company is too small, which is to say that there are too few people to do too much work, and the too-large company is too large, which is to say that the work is so subdivided, and the pieces of any project so widely scattered, that there is no one who can do anything about the whole.

Precisely at this point, the irate consumer who has written a letter—or letter after letter—to an offending record company should begin to realize why he has not received a reply. The man in the little company understands the offense and the problem, but has no time to answer the letter—if in fact he has had the time to read it. The man in the big company is sensitive to the indignation expressed in the letter, but he only partially understands the complaint and therefore has to look around the organization to find the proper person to understand the other part of it. In both cases there is an unseemly delay in response and the consumer becomes incensed.

If all this seems terribly familiar, it is meant to. The difficulties that plague a consumer dealing with an errant utility or a toy manufacturing company or a supplier of kitchen utensils plague him also in dealing with record companies. The problems those other companies have in rectifying honest errors and omissions have their parallel in the problems of record companies. Let us examine only a couple of these.

A consumer orders-and pays for-a record from a small company. The company is not really geared for mail order, but since it is small and its distribution is therefore limited, it has let it be known that it will fill such individual orders. But the record is not yet available to be sent. Perhaps there have been production problems, or licensing problems, or the master tape is tied up in customs, or whatever. The company can either deposit the check, hold it, or send it back. Sending it back requires a covering letter (or else the company might as well not be in business) which no one has the time to write. Holding the check invites an inquiring letter about whether it was ever received, and this must be answered by a letter of explanation that no one has the time to write. Depositing the



check at least stalls things for a time, long enough, the company hopes, for the problems to have been surmounted and the record to have been made available. Eventually, of course, come additional letters not only from the irate consumer, but from consumer organizations, the Better Business Bureau, the local chamber of commerce, and a congressman's office. All must be answered, but, it is to be hoped, only with the statement that everything has now been put right.

Take another case: a consumer buys, at a record store, an album put out by a large company. The album is supposed to include printed texts but it doesn't, and the store is loath to open another album to see if the texts are present. or perhaps it doesn't have another copy of the album. The consumer writes indignantly to the record company. The secretary who opens the letter may be put off by its indignant tone; it is, after all, not her fault. Surmounting that, she must then verify the fact that the album is supposed to contain texts. That much established, it seems from the outside that it would be a simple matter to walk over to where the texts are kept, select a copy of the proper one for album BZY 645328749XY, stuff it into an envelope, mail it, and make everyone happy. But large companies aren't set up that way. The album texts are divided between the pressing plant (where, supposedly, they have all been inserted into the proper albums) and the warehouse. There may be a reference copy of the completed album in the record-company office, but you can't pinch the text from that one to satisfy even an irate consumer. Furthermore, the problem is really rather more complex than it seems. Is the omitted text in this album an isolated instance, or have all or even some of the other albums been similarly shortchanged? If others are missing texts, then this complaining letter is sure to be only the first swallow of a long summer and something needs to be done fast. The one thing that isn't done fast is to get the text to the complaining consumer. It will be done eventually, of course, but there is no one whose job is specifically that, and some one or two or three people will have to take time off from what their jobs properly are to fulfill all the steps of the process necessary to get an extra copy of the texts from the warehouse into the mail to the proper address. Perhaps there will be time for an actual written answer to the original letter, perhaps not.

BUT it is when the consumer mentions discpressing defects that the record man-from large company or small-most tends to head toward the window. Record pressing is always done someplace else, by someone else (even when the record company owns the pressing plant), and even when test pressings have been checked and approved, things can (and often do) go wrong somewhere in the run. So the company lamely, but gamely, offers the irate consumer a new copy of the disc, fully aware that the new pressing may contain the identical flaws-or even different ones-but hoping against hope that it won't. Pressing is the bane of the record industry, and when someone invents a new and foolproof way of pressing good records, the consumer problems of the record industry will largely disappear. There may even be time to answer all the other letters. But don't bet on it. The prices we pay for our technological wonders are not all prefaced by dollar signs.



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FORD DIVISION



## REU RUO ROOLCTS

Ralph Hodges completes his survey of offerings at the audio industry's two most recent trade shows HE road that leads from the audio designer's workbench to your listening room is long and convoluted. One of the principal stors along the way is the industry trade show, at which manufacturers get an opportunity to persuade your local retailer that what he really needs to make his showroom the hottest spot in town is product X, or Y, or Z.

The audio component market has grown to such a size over the last couple of decades that an ever-growing number of trade shows has had to be organized to serve it. In the April issue we reported on the Winter Consumer Electronics Show (WCES) in Las Vegas. and we are now engaged in digesting for our readers the multitudinous innovations on display at the Institute of High Fidelity-sponsored show in Atlanta in May and the Summer Consumer Electronics Show in Chicago in June. Last month we covered the purely electronic components-receivers, amplifiers, tuners, etc.-and this month we turn to those that are at least partly mechanical in operation. First we'l look at record players. . . .

#### **Record Players**

Some years ago most of the action in record players centered on automatic turntables. Then basic manual and single-play turntables began to come into their own. Next it was direct-drive and, ultimately, quartzlocked direct-drive. Most recently came automation and remote-control features, courtesy of ADC and its: Accutrac machines. What is the trend in record players this year? More automation, this time from (among others) Optonica, an established master of automation techniques, whose ingenious microprocessor cassette decks have already caused quite a stir.

The Optonica RP-XI is a direct-drive turntable with a keyboard front panel to program as many as ten operating instructions into the internal microprocessor memory. A hand-held remote-control unit duplicates all the keyboard functions and communicates with the turntable itself via infrared light. The RP-XI can be programmed to play any bands on a record in any order, and since it employs a high-resolution laser device to scan the record, it is able to "count" individual grooves and thus even play preselected portions of bands. The scanning mechanism is physically separate from the tone arm, so that any phono cartridge can be used. A LED digital readout displays the programming status of the machine and indicates which instructions are being carried out at any given moment. The RP-XI is scheduled to be available some time next year, but the price—probably high—has not yet been decided upon.

More automation comes in the form of the four MP (microprocessor) belt-drive turntables in B.I.C.'s new VIA series. VIA (Variable Isolation Adjustment) refers to a readily accessible control that permits the user to "tune" the compliance of the turntable suspension for minimum acoustic feedback. It is a feature of all nine VIA machines, a line which includes a manual model, four changers, and four automatic single-play units. In addition, the two top changers and singleplay units have microprocessors to handle all automatic functions and to govern platter speed precisely, the rotational rate being sensed by an optical system and fed back to the speed-control circuitry. A LED digital readout indicates speed and can also be switched to function as an electronic stop watch for timing recorded selections. Prices for the nine machines range from \$100 to \$320.

The five new Philips Project 7 belt-drive, single-play turntables also use a feedback system to regulate platter speed—it is, in fact, basically the same system used in their motional-feedback speakers. Platter speed is referenced to the frequency of a quartzcrystal oscillator through a phase-locked loop. The Philips machines range in price from about \$150 to \$300.

There are seven new models from Dual this year, three with record-changing capability and two (Models CS714Q and CS731Q) representing the manufacturer's

last word (at the moment) in single-play turntable technology, with quartz-crystal phase-locked-loop platter drives. The Dual "antiresonance filters" built into the tonearm counterweight assemblies are user-tunable on these two top models, which are also available with an exceptionally low-mass phono cartridge designed in collaboration with Ortofon to achieve an effective total tone-arm/cartridge mass of 8 grams.

Technics, never a company to be shy about its eminence in the record-player area, contented itself with a mere nine (!) new models this year. Five are direct-drive models, two of them quartz-locked, and four are belt-drive designs. One of each category—the direct-drive SL-3350 and the belt-drive DL-235—change records, and seven of the machines have all controls accessible even when the dust covers are closed. The direct-drive units start at \$180 and go up to \$320, while the belt-drive models range from \$100 to \$180.

Micro Seiki's turntable line is now seven strong. Three models come with the new MA-707 tone arm, which has a sliding weight that can be used to establish an armcartridge resonance frequency of 10 Hz with virtually any cartridge of the user's choice (instructions for adjustment are provided by the company). Highlights include the \$700 DQX-1000, an improved version of the innovative DDX-1000 that can take up to three tone arms (none is supplied), and the \$500 DQX-500, a strikingly designed machine in a circular format with an outrigger support for



the new tone arm (supplied) and a separate control box.

Pioneer's record-player line this year is deeper by four direct-drive models and one belt-drive model. The direct-drive machines are all quartz-locked and feature Hall-effect controlled motors; model numbers are PL-630 (\$400), PL-610 (\$350), PL-560 (\$275), and PL-540 (\$225). The more elaborate units have meters to show the effects of their pitch controls. Marantz's new top player, the quartz-locked direct-drive 6370Q, has a new tone arm with refined geometry for minimum lateral-trackingangle error, and a little reservoir in the pivot assembly to contain a special fluid for arm damping. Marantz has also added a second direct-drive machine, the 6270Q. Kenwood's two latest turntable offerings are divided between direct-drive and belt-drive designs, with the \$260 direct-drive KD-5070 featuring the manufacturer's antiresonance resin-concrete base. The belt-drive KD-2000 with a floating suspension is priced at \$145. All of JVC's new turntable models are quartz-locked direct-drive, and one of them (the \$270 QL-5) is available without tone arm as the QL-50 for \$220. Sansui's newest direct-drive turntable, the SR-5090, has a tone arm with a great deal of mass deliberately built into the pivot assembly.

Akai has joined the ranks of record-player manufacturers with its first five such products. Models at \$300 and \$250, the AP-307 and AP-306, are quartz-locked direct-drive machines. The belt-drive AP-100 is available at \$130. Yamaha's YP-D8, the company's second direct-drive turntable, has a handsome ebony base and a price of \$395. Garrard's seven new introductions are led by belt-drive, single-play machines, the \$210 GT35AP and the \$165 GT25AP. A new direct-drive manual, the DD130, is priced at \$160. Fisher has been at work expanding its "Linear Motor" series of direct-drive turntables; it now stands at three models with the addition of the MT6250C and the MT6224C.

ADC believes it has licked problems associated with turntable-base resonance with a "sandwich" type of base construction in which the physical characteristics of two dissimilar materials serve to damp one another. The top model employing the technique is the \$250 direct-drive (quartzlocked) 1700DD, followed by two less expensive machines (\$200 and \$130). The technique has also been extended to three new top models in the Quanta line of ADC's parent organization, BSR. Model numbers are 800, 700, and 600, and prices are \$230, \$180, and \$130. Five new models have also been added to the BSR McDonald line, led by the \$70 multi-play 250S with integral ADC magnetic cartridge.

Stanton has introduced a new recordplaying system, the 8005A, with the company's magnetic-suspension system for the platter and a new unipivot arm that will be available separately at a projected price of \$150. The whole 8005A system, including Stanton 881S cartridge, is slated to sell for

about \$500. As part of its SAE TWO line, SAE now offers the T3T direct-drive turntable (\$225) with front-edge-mounted controls. Lux has significantly enlarged its phono offerings, first with the \$285 PD270 direct-drive turntable supplied without tone arm, with the TA-1 tone arm (about \$125) with switchable arm shafts for conventional and moving-coil cartridges, and finally with the 115C moving-coil phono cartridge with titanium cantilever and modified elliptical stylus, planned to sell at \$195. Thorens' newest turntables are the TD-115C and the TD-110C, both with new servo systems to control motor speed and compensate for variations in the load on the motor, and with improved versions of the "Isotrack" tone arm. The TD-115C has automatic end-ofdisc shut-off and tone-arm lift; the TD-110C is a manual machine.

Five new Visonik turntables were announced at the IHF show, led by the \$250 direct-drive DD-8200 and followed up by four belt-drive units priced from \$200 down to \$125. Series 20, the esoteric branch of Pioneer, offers the PLC-590 as its turntable; the unit is quartz-locked direct-drive and is supplied without arm, although mounting panels for the Shure/SME and other arms are provided. Mitsubishi has improved the direct-drive system and elaborated on the operating conveniences for the new DP-EC20 and DP-EC10 turntables, which retain a highly unusual feature: an optical system that detects disc diameter (and hence playing speed) by means of a light that shines





through the platter itself. Lenco presented a similar sort of surprise this year: a system based on fiber optics that provides a shadowgraph display of exactly where the stylus is as it traverses a record side. The feature is described as a convenience in cueing and timing, and it will be incorporated in the L-744DD direct-drive turntable intended to sell for between \$250 and \$300. Lenco also announced a new belt-drive machine, the L-246, at between \$170 and \$180.

Audionics introduced the LK1, a very straightforward 331/3-rpm belt-drive turntable with emphasis on immaculate performance. An optional electronic control adds 45-rpm operation. Braun's two turntables, the PES 550 and PS 550 S, have black platters flush with their motorboards as well as other stylistic innovations. Denon now has three basic turntable mechanisms, all directdrive. The Monitor Audio line from England presented its first direct-drive turntable in the U.S., the ET 500. And JBE, another English organization, has a number of novel turntables with unusual platter designs and, in some cases, transparent acrylic bases. About the most novel turntable design you can buy at this time, however, is the Oasis T-1, a fluid-drive machine with a coupling somewhat reminiscent of an automobile's automatic transmission. The device's platter is powered by two motors, and it will take up to two tone arms.

#### Phono Cartridges

Phono-cartridge manufacturers, who generally do not introduce new models of their intricate little gems on a regular basis but rather as advances in technology permit, tend to maintain a low profile at the shows. Nevertheless, the latest cartridge products are always on display, and this year they included a few new introductions.

The MK III series from ADC encompasses a new version of the XLM in addition to four new models in the QLM series. A new cantilever structure and refinements in the shape and polish of the styli are the major features, these reportedly leading to less record wear.

The Sonus cartridges, now organized un-

der a "Gold" series and a "Silver" series, are all new for this year. The Blue, Red, and Green labels have been retained for the Gold series, all three models being identical except for stylus configuration (line-contact, elliptical, and spherical, respectively). The Silver series of two models offers line-contact and elliptical tips.

Thorens has brought out a moving-coil phono cartridge, the TMC 63/TMC 70, the two model designations referring to the different versions of the Isotrack tone arm that. will accept the cartridge (the cartridge is fully integrated with the replaceable arm shaft for the appropriate tone arm, thus ensuring an ideal arm-cartridge relationship). For stylus replacement, participating dealers will exchange the entire cartridge/arm-shaft as sembly for a new one. And Ortofon has introduced its least-expensive moving-coil cartridge yet, the MC 10, at a price just over \$100.

Beryllium cantilevers distinguish the two new top-of-the-line pickups from Audio-Technica, the AT15SS (\$150) and the AT20SS (\$195). They also have new stylus configurations, referred to as "Shibata Plus." The new stylus assemblies (\$75 and \$95) will fit the previous A-T top-of-the-line cartridge bodies, affording an improvement in performance. Meanwhile, Osawa has brought out a phono cartridge with a carbonfiber cantilever as part of its Moving Permalloy series. The \$100 300 MP is joined by the \$65 200 MP and the \$35 100 MP to complete the line.

An exceptionally sturdy pickup for professional use is now being produced by Empire under the designation "Broadcast One." Grace has a cartridge, the SF-90, that is integrated with a headshell that fits the standard bayonet connector used on many tone arms. And the Grace distributor, Sumiko, has also announced a new line of cartridges under the Andante name. Goldring's G900 is an exceptionally low-mass cartridge (4 grams), made so in the interest of controlling tone-arm/cartridge resonance. Denon has also achieved a significant reduction in cartridge mass in the latest of its DL-103 moving-coil series, the DL-103D.

Nagatronics, a new name in the U.S. but one of the old-time Japanese suppliers of jewel tips for other cartridge manufacturers, is making its debut with a full line. The top Nagatron cartridge employs a ribbon (as in a ribbon microphone); it is, as far as we know, the first such design to appear. And Micro/ Acoustics, Pickering, Shure, and Stanton displayed their current offerings, with Pickering announcing the XV15/625DJ, a ruggedized cartridge designed specifically for rough disco use.

#### Video

The emergent video-disc player is not just a turntable, but rather the heart of a whole new playback technology for both video and audio programs. This year at CES, Matsushita (Panasonic) gave many their first opportunity to observe its "Visc" system in action. The system plays discs—recorded in real time and produced through conventional pressing techniques—of 12- or 7-inch diameters. Playing time is up to an hour per



side of video from the "Visc-II" disc, accompanied by two channels of audio. Among the most recent Matsushita introductions is the "Visc-AD," with two channels of digital audio playing for 30 minutes per side (no video is included).

The Visc players are compact, reliable, and simple to operate. They employ a mechanical (piezoelectric) pickup with a stylus life on the order of 1,000 hours. Price of the players in Japan is not expected to exceed \$600. The discs themselves will cost approximately 20 to 50 per cent more than conventional audio records. Ultimate availability will of course depend on the interest shown by record companies. While Visc of course faces considerable competition from other entrants in the video-disc sweepstakes, it is interesting to note that there is likely to be a certain amount of intersystem compatibility, with Visc able to play the Selectavision discs from RCA, for example.

#### Tape Equipment

Technical upheavals large and small have shaken the cassette format since its inception, and this year the quakes continued with even more than their usual intensity. First of all, the anticipated arrival of the two-speed (17/8 and 33/4 ips) cassette deck took place; it was three arrivals in fact, consisting of the T-1, T-2, and T-3, all from B.I.C. A higher tape speed benefits every aspect of performance having to do with sound quality, and this is the motivation behind the introduction of the new machines. It also, of course, converts the playing time of a C-90 to that of a C-45, a C-60 to a C-30, etc., thus leaving the user to decide the playing time vs. fidelity question for himself. The top-of-the-line T-3 is a three-head dualcapstan machine with "double-Dolby" noise reduction and user-adjustable Dolby calibration. The T-1 is the "basic" B.I.C. two-speed (and two-head) machine. All three are front-loaders with handsome black-panel styling.

The second recent quake has been the anticipated arrival of metal-alloy (rather than metal-oxide) tapes, of which 3M's Metafine is expected to be the first product available. At \$1,300, the recently announced (see September "Tape Talk") Tandberg TCD 340 AM is Metafine-ready, with three heads, a highly refined transport, and Tandberg's new "Actilinear" electronics. The Tandberg TCD 340 A (\$1,150) is virtually the same machine without the Metafine capability, while the \$650 TCD 320 is a two-head design.

Nakamichi, as innovative and imaginative as ever, has adopted a radical stance on metal-alloy cassette tape. In a long technical paper the manufacturer pointed out that today's head technology could not take full advantage of present metal-alloy tapes in a two-head cassette machine because the single narrow record/playback gap would result in head-core saturation with the high bias levels required. Accordingly, Nakamichi proposed a "broad-bias" version of metal-alloy tape, a sample of which it stood ready to demonstrate, that could be successfully recorded with appreciably lower bias levels. Full-strength metal-alloy tape would

be left to three-head machines such as the Nakamichi 1000 II "ZX," a prototype of which was shown at CES, along with a prototype of the 600 II "ZX," the proposed two-head machine for the broad-bias tape. Both machines employed the Telefunken consumer noise-reduction system developed in cooperation with Nakamichi. Marantz had no comment on this controversy, except to introduce the new 5025 cassette deck with a Metafine pushbutton discreetly in evidence on the front panel. (Marantz also introduced a basic Model 5000 cassette deck, the \$190 Model 1810 as part of the 'Promotional'' line, and under the Superscope name a line of portable three- and two-head cassette decks, with and without Dolby, at prices ranging from \$120 to \$240.)

The three-head, three-motor Model C-1 is Teac's new top-of-the-line cassette machine, incorporating a transport that has hitherto been reserved for commercial users. The \$1,300 deck has dual capstans, complete solenoid switching of transport functions, and facilities for easy and optimum interface with an external dbx noise-reduction module. The same transport is available in three other new machines, the three-head A-800 (\$700), the A-601R (\$600), and the A-700 (\$550).

Another three-head machine with a rather special transport is the Eumig CCD, which eliminates the capstan flywheel in favor of an optical scanning system that feeds back through a servo to correct the speed of the capstan motor instantaneously. The CCD also has another unique (to my knowledge) feature: voltage-controlled amplifiers for its gain stages, so that level controls do not handle actual music signals but only provide d.c. control voltages that adjust amplifier gain. Price: \$1,300.

Three new cassette decks now grace the Pioneer lineup, the foremost of which (second in the total line) is the CT-F900, a \$475 three-head machine with fluorescent recording-level indicators, a digital tape-counter/ timer with LED readout, and various modes of memory rewind. The Pioneer CT-F700 has three meters, the third of which functions both as an aid in setting the deck's continuously variable bias and as a specially equalized peak-reading meter during recording. The third Pioneer machine, the basic CT-F500, has all the conventional cassettedeck features for a comfortable \$175.

Newest of the Yamaha cassette decks is the TC-320, a \$225 front-loading unit. And newest of the Technics cassette decks is the similarly equipped \$200 RS-616, a modest follow-up to the very elaborate RS-M85 low-silhouette machine (\$650) brought out earlier in the year. Hitachi's D-7500, the three-head design with the Hall-effect playback head, is now entering production, with the retail price estimated at \$700. And Aiwa has brought out two new cassette decks, one of them, the AD-6900U, with the manufacturer's excellent two-tone system for bias adjustment as well as separate meter needles for peak and average levels, and the other, the AD-6350U, with bias fine-tuning for ferric-oxide tapes.

Front-loading cassette decks (Models 819 and 809) are now available from Dual. The company's "fade/edit" function has been included in the 819, along with a switchable



#### New Products...



In Atlanta, Chip Carter (left) and Annette and Jeff Carter (second from right) chat with the IHF's Len Feldman (center) and Jerry Kalov.

limiter to prevent overload on signal peaks. Akai has added one new cassette design, the GXC-706D, with front loading, a glass/crystal-ferrite head, and a price of \$280. The three-head DT-30 from Mitsubishi has some features that parallel those of the more elaborate Aiwa machines, including a two-tone bias-adjust system and automatic switching of the deck into the record mode when the Mitsubishi DP-EC20 record player is used in association with it. A two-head Mitsubishi deck, the DT-10, has a meter calibrated for C-60 and C-90 cassettes that tells the amount of recording time remaining. The meter works by means of an optical system that senses the rotation of the supply hub.

A de luxe cassette deck (Model TA-680D) with a price of about \$700 has been added to the Onkyo line to join the TA-630D introduced just recently. Kenwood's latest cassette decks are both front-loading machines with prices of \$275 (Model KX-630) and \$225 (Model KX-530). JVC appears to have no fewer than ten new cassette machines, ranging from the budget-price KD-10 to the \$530 solenoid-controlled KD-3030, with one of them, the \$360 KD-1636II, being a stereo portable equipped with Super ANRS. A JVC exclusive found on the new \$500 KD-85 is a display of twenty-five LED's that indicate peak recording levels in five different frequency ranges. The SAE TWO line has a cassette deck, the C3D (\$400), with front loading and a solenoid-controlled logic-interlocked transport. Harman Kardon's top model, the hk3500, is a threehead, two-motor deck with an 8,000-Hz oscillator for triming bias to the tape being used. A pair of two-head machines, the hk2500 and hk1500, have also been introduced by Harman Kardon.

Wireless remote control is now offered on two more Fisher cassette decks, the CR5150 and the \$550 CR5125, both incorporating three heads. The CR5150's remote controller duplicates all transport functions (the CR5125's merely engages and disengages the pause function), and the machine has a large digital clock/timer built in. Also, Fisher remains one of the few manufacturers still actively working in the eight-track cartridge field, marketing a new Dolbyized deck, the ER8125, and a machine that will handle both cassette and eight-track, the ER8150.

Rotel's new RD-2200 has rows of thirteen LED's to indicate peak levels being fed to the cassette. Optonica's RT-6505 is basically the company's impressive microprocessor cassette deck in black-panel form, with a price of \$370. Lenco will shortly have a new cassette deck, the C 1202, seen at the shows in prototype form and expected to sell for just under \$400. Another Lenco highlight is a new version of the RAC-10 cassette player/changer, this one with switchable Dolby noise reduction and a built-in monitor speaker. Denon's cassette deck, the DR-350, has a specially designed cassette well that promotes accurate alignment of the cassette. Sharp and Philips both have new front-loading machines (Models RT-1157 and N2535, respectively) priced at about \$200. The Sharp deck incorporates the company's "Automatic Program Search System." And among several new machines from England are the strikingly styled Neal 302 Studio Cassette Recorder with three motors and adjustable bias, and the frontloading 7060 and 7070 from Amstrad.

Developments in open-reel include the replacement of Teac's classic four-channel "Simul-Sync" A-3340 with the new \$1,500 A-3440. The new unit has the same general specifications as its predecessor but completely new transport, circuitry, and logic boards as well as a redesigned control layout. At \$800, the new A-2300SR three-motor 7-inch-reel machine is the least expensive auto-reversing deck in the Teac line; the \$1.050 A-3300SR is the corresponding model with 10½-inch reels. Finally, the A-6100 MK II is an improved version of Teac's half-track machine intended particularly for mix-down operations.

Tandberg's impressive new TD 20 A, a 10<sup>1</sup>/<sub>2</sub>-inch-reel machine (\$1,200), incorpo-

rates the manufacturer's Actilinear circuitry and is unique in having a fourth motor used to engage the pinch roller and tape guides. It is a two-speed machine available in combinations of  $3\frac{34}{4}$ ,  $7\frac{1}{2}$ , and 15 ips in half- or quarter-track formats. Bias is adjustable at the front panel, and Tandberg says it can easily be changed to handle metal-alloy tape when it becomes available in open-reel form.

Technics has created three new open-reel models, all taking 10<sup>1</sup>/<sub>2</sub>-inch reels and all equipped with the "Isolated Loop" transport. The \$2,000 RS-1520US is a half-track model, while the TS-1700US at the same price is a guarter-track machine with automatic reverse. All three of Akai's latest open-reel offerings take 7-inch reels. The basic Model GX-4000D becomes the GX-4000DB when Dolby noise reduction is added. The GX-267D has three motors and six heads distributed around a central capstan to facilitate auto-reverse operation. Finally, the English-made Ferrograph has returned in the hands of Neal, once again offering its series of Logic 7 semi-professional openreel machines.

#### Speaker Systems

As always, we were impressed—maybe even stunned—at the number of new loudspeakers at the shows, particularly at the CES. If everyone who attended the CES took a speaker home with him, we are certain there would be more than enough left over to provide canned music for every restaurant and cocktail lounge in Chicago. In the face of such a staggering multitude we must, as usual, confine ourselves to major manufacturers and highlights.

Marantz's MK II speaker line is now augmented by a new design with a 15-inch woofer, the Model 8, which also has a 5-inch



mid-range and a 1¾-inch cone tweeter. Kenwood's LS-Series-B line is new, with four ported models employing woofers ranging in size from 12 to 8 inches in three- and twoway configurations. Prices range from \$300 each to \$235 the pair. Pioneer also has new ported systems, the two-way Project 80 and the three-way Project 120.

An interesting new subwoofer has been made a part of the Audio Pro line of Swedish-made audio products from Intersearch. A built-in 150-watt amplifier presents the subwoofer's two 7-inch drivers with a complex source impedance (with certain of its characteristics adjustable) that is able to electrically simulate the addition of mass and mechanical damping to the drivers as required. The result is said to be an unusually compact subwoofer with response and reasonable sensitivity down to 20 Hz. Price is \$695, which includes the crossover necessary to join the subwoofer to existing fullrange systems. Intersearch also offers their own full-range systems at prices from \$157 to \$295

The Transar/atd from ESS has acquired a new amplifier to drive its remarkable low-frequency transducer and also to adjust its relative output in 1-dB steps. Among several new developments at JBL is the L220 system, the company's first phase-aligned product. The necessary alignment of the various drivers' acoustic centers has been accomplished by acoustical loading devices, so that the undesired effects from irregular speaker-mounting surfaces are said to have been eliminated. JBL also has a new, inexpensive two-way design, the L19, together with a program under which its professional studio monitors will be marketed by consumer audio dealers.

Exotic cabinet shapes are meeting with favor amongst some major speaker manufacturers this year. The Epicure "Trilogy" is a three-way design with a 10-inch woofer housed in a narrow truncated pyramid. The new Ohm I is similar in shape, with five drivers mounted either on the top or the frontal surfaces and a price of \$475. Design Acoustics' D-12 "Dodecahedron" speaker has given way to the D-12A, again with a symmetrical twelve-sided enclosure, but now with an even greater variety of drivers (two 8-inch woofers, two 5-inch cone mid-ranges, one 11/2-inch dome mid-range, three 11/2-inch cone tweeters, and two 1-inch dome tweeters) positioned irregularly but strategically on its various external surfaces. Hemispherical or spherical dispersion can be selected. The Shahinian "Obelisk" has now gone into production. It features an 8-inch woofer, a 10-inch passive radiator, and three 1-inch dome tweeters in its internally complex enclosure (externally it does resemble a squat obelisk with vertical sides).

Phase coherence is still the byword at Technics, which has now prepared its large systems—including the SB-E200 and SB-E100—with horn-loaded mid-ranges and tweeters for introduction to the market, and also added some phase-coherent ported bookshelf systems—the three-way Models SB-X50 and SB-X30 and the two-way SB-X10—at prices of \$500 to \$200 the pair.

B.I.C. has just established a loudspeaker line outside the Venturi series. The new designs, consisting of the Models 66 (\$269), 44 (\$179), 22 (\$135), and the two-way Model 11 (\$85), are all air suspension and have as their object the achievement of moderately high efficiency together with extended, uniform frequency response.

Small speakers continue in vogue. Yamaha's two-way NS-10M "Mini-Monitor" has a 7-inch woofer in a true bookshelf-size cabinet and a price of \$130. The JVC S-M3, another two-way, has a 4-inch woofer, a 1inch dome tweeter, and a price of \$160 per pair. The Hitachi HS-1 (\$100) goes to a 4½inch woofer in a sealed enclosure. Akai's



SW-7 (\$145 per pair) has a horn tweeter together with a 5-inch woofer and no grille except for a perforated metal screen over the woofer. and Aiwa's SC-47E employs a single driver in a ported enclosure. Price: \$90 the pair.

The CM/530 is the latest in the series of "computer optimized" systems from Koss. It has an 8-inch woofer and an 8-inch passive radiator together with a 1-inch dome tweeter. The RH541 is the latest motionalloudspeaker from Philips, feedback equipped with a built-in 30-watt amplifier, a 6-inch woofer, and a 1-inch dome tweeter. It costs under \$200. Mitsubishi has developed a sandwich-construction woofer cone of aluminum honeycomb surrounded by glass fiber. This has led to the production of the 12- and 10-inch drive units used in the new MS-30, MS-20, and MS-10 air-suspension speaker systems, which are three-way (MS-30) and two-way designs.

There have been great changes at ADS, culminating in a Series II encompassing the top-of-the-line Models 710, 810, and 910 (prices are \$280, \$360, and \$660, respectively), and three new two-way models, the 420 (\$109), 520 (\$149), and 620 (\$189). The company also has a plug-in 300-watt biamplification module for the 910 Series II in the works.

Bozak, now reorganized under new management, has revealed the LS-300 (\$260), with an 8-inch woofer and cone mid-range and tweeter, the first of a new series of phase-coherent loudspeakers. B.E.S., continuing with its line of planar-diaphragm dynamic loudspeakers, has expanded to the two-module D190w (\$599) and the fourmodule D280w (\$997), which stands a full 76 inches high. The dbx Model 5000 is a subwoofer in a circular ported enclosure that, with its built-in power amplifier, operates from 25 to 100 Hz.

The Chartwell LS3/5A, marketed by Osawa, is called the "Baby Monitor" as a result of its compact dimensions, the largest of which is only 12 inches. Another British design, the Leak 3090, is anything but compact, with a 15-inch woofer in a transmission-line enclosure and an upper sub-cabinet (it swivels) containing three more drivers plus output-level controls. Suggested price is \$870.

Development of its top-of-the-line Model 330 three-way speaker system has led Avid to redesign much of its existing loudspeaker line to achieve the same goal-an object Avid calls "Minimum Diffraction." The result is five new models, all with specially shaped "couplers" around the mid- (if present) and high-frequency drivers, and all without any raised front-panel surfaces that might serve as secondary reflective sound sources. The specific design goals of Thorens' "Sound Wall" speaker systems, Models HP 308 and HP 360, have resulted in a pair of tall, broad floor-standing units only 4 inches deep. Dynamic drivers in multi-way configurations are reportedly concealed within.

The rack-mountable monitor speaker system is a new concept represented most prominently by Sansui's "Cue Monitor Speaker Ensemble" and Ultralinear's RM-19. Both are black-panel units the approximate size of an integrated amplifier.





Atlanta show visitor Stevie Wonder is greeted by IHF president Jerry Kalov.

The Sansui version is a stereo speaker system with two small drivers mounted left and right on the front panel. The Ultralinear is a mono system with a pair of 4½-inch woofers and a central 1-inch soft-dome tweeter.

Synergistics' innovation for this year is the S-92 "three-piece" speaker system, consisting of a bass commode containing two 12-inch woofers and a pair of shallow panels with 41/2-inch mid-ranges and filmdiaphragm dynamic tweeters in a vertical array. Price is nominally \$2,500 for the ensemble. The most modest of the Audioanalyst "PhaseMatrix" systems, the M2, is also becoming available at \$139. Its small size invites car installation. Audioanalyst will also be offering a subwoofer, the "BassMatrix," at \$249. Cizek already has a subwoofer, the MG-27 (\$295), which can be used with an electronic crossover or the internal passive crossover supplied. Two separately enclosed 10-inch woofers are employed.

The two-way, air-suspension Euro 5 is the first of an emerging new line of Visonik speaker systems; it carries a price of \$170. RTR's pyramid-shape PS/1 is called a "satellite" speaker system. This three-way design (8-inch woofer) is strongly recommended for use with the DAC/1 subwoofer with a response down to 16 Hz. "The Reference" is Hartley's most recent loudspeaker design, incorporating that manufacturer's formidable 24-inch woofer together with mid-range, tweeter, and super-tweeter drivers. And on the subject of tweeters, Burhoe Acoustics announces a new 1-inch unit with a compound-curve diaphragm and response rigorously specified up to 25,000 Hz. Presumably it will find wide employment in the various Burhoe designs.

CES gave the world its first look at the B&W DM2/II, a redesign of a highly successful earlier B&W model. The present system is three-way and supplied with an acoustically beneficial pedestal. Cerwin-Vega has a new truncated-pyramid multiway system with a highly unusual looking hemispherical woofer diaphragm. It works well—and very loudly—with a new 18-inch double-spider subwoofer that has a stationary central dust cap. The Jennings Research Group has no fewer than thirteen models in its line. A somewhat smaller line of three models from BlackMax also includes the M5001 automotive two-way system. The BlackMax woofers have voice-coil bobbins of "polyimid," a transparent synthetic material created by duPont that is said to be exceptionally temperature-resistant.

Oysonic is a relatively new company offering a series of column speakers with plenty of high-frequency sparkle. Acoustat has been around long enough to enter into a second generation of products, which it has with the Monitor, a large, full-range electrostatic with its own built-in amplifier that drives the electrostatic elements directly without an intervening step-up transformer. The existing Acoustat X can be converted into a Monitor with a factory-available kit. Associated Sound is a very new company marketing the "'Mr. Johnson" loudspeakers, top model of which is the Pentagon (\$265), a multidirectional system designed to be used with either of two subwoofers priced at \$275 and \$325.

The Metronome, another speaker system in the pyramid configuration, has undergone further modification and is now recommended for use with sophisticated add-on aluminum-ribbon tweeters selling for \$990 the pair. Another unusual loudspeaker, manufactured by Beta Sound, is an acoustic-labyrinth design available in two versions, the 075 and the larger 1001 B, both in rather handsome cabinets integrated with large mid-range horns. The Point 3 System is a three-piece ensemble with a woofer commode that can serve as a coffee table.

PSB is a Canadian outfit aiming at the production of essentially conventional systems affording high performance for the money. Model designations (Avanté II, Passif II, etc.) are imaginative, and the line includes a mobile-applications system, the Alpha (\$220 per pair). Other prices (per pair) range from \$340 to \$990. The new GLE Series of three two-way and three three-way systems is the latest news from Canton. Emanation, a young New England company, has four 'residential'' speaker systems on its roster and two "commercial" designs with generally higher power-handling ability. Sound Dynamics, meanwhile, will shortly be adding the Model 2183, described as a professional monitor system, with a price of \$1,500. The consumer speaker line from TSS is now led by the T-4000 (\$319), a twoway column design employing a 6-foot transmission line for its 8-inch woofer.

In its more elaborate designs, Analogue favors separate modules for its mid- and high-frequency drivers. In the new AL-6 and AL-7 these drivers are film-diaphragm dynamic units, and they are mounted in a curved screen supported above the woofer cabinet by a pole. Fulton Musical Industries favors speaker systems that use its FMI 80 as a mid-range/tweeter module, as does the new B Modular System, with two 8-inch woofers to provide the lowest frequencies.

AAL now has a mini speaker, the Micro 100, using a 4-inch woofer and a 1-inch dome tweeter in an aluminum cabinet. LTC continues with its Neoprene-loaded woofer that deliberately attenuates mid-range output while enhancing deep-bass response. The line is now three models strong, including a 'tower' system, the \$340 Model 100. Showco, a company that has spent most of its operating life in the commercial sound field, now also has a tower speaker for home use, the Pyramid S-200, with a downwardfiring woofer and other drivers placed in various locations about the 42½-inch-high enclosure. The Clarke systems from New England Audio Associates comprise two models, the Prelude and the Precedent, with 8- and 12-inch woofers, respectively, and cabinet finishes of wormy chestnut.

While there are certainly enough domestic speaker systems to contend with, the invasion of overseas models continues with increased intensity. Ramko, an Israeli company, already has an extensive line of (mostly ported) loudspeakers, and it has announced its intention to create new designs to suit the preferences of the national and even regional U.S. market. The Unitra loudspeakers, including the three-way ZG-60 and ZG-40 (the latter with a 10-inch passive radiator), are products from Poland, the Hungarian Videoton continues to show an extensive line that includes some remarkable values. and the British are still coming. JR Loudspeakers arrived with the LPA subwoofer, presumably to be used with the diminutive JR 149 "cylindrical" full-range systems. Mordaunt-Short brought the new "Signifer" [sic] system, a three-way design. Celestion has been here for some time and now seems firmly entrenched with its six Ditton models. Amstrad is swarming up the beaches with the two-way Acoustra 1500 and 2500 and the three-way EX.300. H/H Acoustics has numerous high-quality raw drivers to purvey, all of them basically woofer and mid-range devices (appropriately, the "Invader" series is prominent). And another British company called Moonlight Electronics has produced a handsome brochure that tells absolutely nothing about their remarkably styled speaker products except to say that they photograph well (they do) and that the company repudiates all conventional specifications.

#### Accessories

If the various digital demonstrations overwhelmed the shows with quality, the mobile stereo equipment did the same with quantity. Marantz has entered this market in a big way, leading off with two versions of the CompuTuner, Models CAR-420 and CAR-410, microprocessor-equipped automobile receivers with digital readout for station frequency (which also functions as a clock), six preset stations that can be stored in the microprocessor memory, and built-in cassette players. A pair of similar units without microprocessor features is also available, together with an extensive line of car speakers.

Jensen's car receivers, consisting of three models with cassette players and three more with eight-track facilities, all have Dolby-B noise reduction that functions for tape and for Dolbyized FM broadcasts. Four of the receivers can be switched into biamp operation, and the two top-of-the-line models for the respective tape formats include separately housed power amplifiers. Jensen's prices range from \$300 to \$470.

Pioneer of America's KE-2000 (\$270) also has memory features capable of presetting



five FM and five AM stations—a total of ten—and a conventional-appearing tuning dial that employs thirty-two LED's instead of a dial pointer. There is also a built-in cassette player. Other new POA products are the \$250 KPX-9000 "Supertuner," also with cassette player; the similar \$180 KPX-600 "Supertuner"; two new cassette players, the \$140 KP-88G and \$120 DP-66G, the former with Dolby noise reduction; and a host of new car speakers, including several three-way designs. The "Supertuners" and cassette players are designed to be used with separate Pioneer power amplifiers.

ADS has a new car speaker, the two-way 300C, which is an adaptation of its very compact Model 300 home speaker. Price is \$150. Clarion has a 6 x 9-inch car woofer, the SK-103 (\$150 per pair), with an outboard mid-range and tweeter. A somewhat smaller companion model is planned at \$130. Additional new Clarion products include a cassette-player/receiver (Model PE-751A, \$340) with such features as auto reverse and Dolby noise reduction, a new power-booster/equalizer, and several under-dash radio. cassette, and eight-track products. J.I.L. is similarly into cassette and eight-track, with seven new in-dash radio/tape combinations, two of which have digital readouts and memory features

The "Linear-Drive" headphone series from Technics makes use of a new rectangular film-diaphragm driver and is said to employ special acoustical compensation. The three models are the EAH-810, the EAH-820, and the EAH-830; prices are \$40, \$60, and \$80. Audio-Technica's ATH-1 "Gram Cracker" headset (\$30) weighs in at just 4¾ ounces. It is a dynamic non-isolating design with "supra-aural" cushions. Analogue's AH-500, a two-way headphone, is supplemented by two less elaborate models, the AH-400 and AH-300.

The Nagaoka line of record-care products from Osawa is quite extensive, featuring an adhesive roller to clean discs as well as a variety of sprays, brushes, adjustment aids, and tape-care items. At \$10, Sound Guard's Stylus Care Kit is said to provide virtually everything needed for stylus care, including cleaning fluid, brushes, a device to blow away debris accumulations, and a magnifying glass. Empire has added to its "Audio Groome" line with an antistatic record mat, stylus cleaning fluid, a low-mass carbonfiber headshell (\$15), and connecting cables with gold-plated plugs (\$11). A fifth Empire product, Disco Film, is applied to the record from its applicator container, allowed to set, and then peeled off, taking dirt and other contaminants with it! It's startling to watch in use. Audio-Technica's latest record-care item is the AT6012 "Sonic Broom" (\$11), a fine-fiber cleaning pad with a reservoir in the handle to contain and dispense cleaning fluid. And a Discwasher product has nothing to do with records; it's an air mattress in the shape of a bottle of Discwasher fluid, and it comes free with the purchase of the company's DiscKit.

The Decca Microbe, a pivoting assembly with several brushes that mounts on the front of a cartridge, discharges static, cleans the record, cleans the stylus, and protects both from accidental damage.

Equipment racks and other storage sys-

tems busted out all over again this June. JVC stepped in with five new models, four in a vertical format and one horizontal; one of them, the LK-1000, has a lockable glass door. The SAE R-1 (\$200) and R-2 (\$240) are all-steel vertically oriented racks on casters with standard EIA vertical spacing for equipment-mounting hardware. This manufacturer also offers stackable rack assemblies for its components as well as a cassette-storage rack.

Inttra makes an attractive 19-inch rack with walnut side panels and a choice of fastener schemes. Levitation Systems bases its approach to components on a vertical pole stand to which brackets can be bolted at any height and spacing. A wide variety of accessories can be added to the basic system. Amstrad's SR 301 houses that manufacturer's equipment in a vertical wood compartment complex available in vinyl finishes of walnut, teak, and black. And the Gusdorf line of fine-furniture units for audio components goes on and on.

#### Addenda

Finally, we'd like to fill in a few omissions from last month's coverage. Teac has initiated a line of electronics with two integrated amplifiers, the 50-watt AS-M50 and the 30-watt AS-M30. Black or silver panels will be available, as will rack-mounting facilities. Prices are under \$300 and under \$200, respectively. A pair of matching tuners is also planned.

Burwen's Remote Variable Field Equalizer operates in six bands per channel and is a hand-held unit connected by a 20-foot cable to a "base-station" module incorporated into the audio system itself. Adjustments of up to  $\pm 44$  dB are possible at the frequency extremes. Lux has made some significant additions to its Laboratory Standard Series, including a tuner, an integrated amplifier, a preamplifier, an equalizer, and stereo and mono power amplifiers. And Bose now has a relatively modest receiver and a turntable as part of the Model 360 prepackaged component system.

Do there it all is for another busy year, awaiting delivery to your local audio emporium-which reminds me to add that a product's appearance at a trade show is no necessary guarantee of its immediate availability. Prototype designs can present problems in the production stages, suppliers can lag on the delivery of necessary parts, or dealer reaction can, on occasion, be too tepid to justify actual introduction of a product. There may therefore be a little wait before you see some of the products mentioned above "in the flesh." Please do not upbraid us for any such tardinesses or hound us for additional information. Further news about a given product's market destiny will be passed on to you in our New Products pages as we receive it.

As usual, we are making available a list of addresses of manufacturers mentioned in this report. A stamped, self-addressed long envelope sent to Stereo Review, Dept. CES, One Park Avenue, New York, N.Y. 10016 will bring it to your mailbox. Peace and undistorted sound be with you.

# MARVIN

What has Hollywood's first real superstar composer been up to lately?

#### By Eric Salzman

Los Angeles, April 9, 1974: Debbie and Cher flank Marvin at the Motion Picture Academy Awards to congratulate him on his three Oscars—one for the song The Way We Were, the others for the complete scores for The Sting and The Way We Were.

ARVIN HAMLISCH describes himself alternately as a chameleon and as a cassette tape recorder. Like the chameleon, which changes color according to its environment, and like the recorder, which changes its program each time a new cassette is popped in, Hamlisch is equally at home with and individually responsive to whatever environment he finds himself in, whether it is film, theater, or the recording studio. He is, of course, the adaptor of Scott Joplin rags for the soundtrack of The Sting, the composer of the award-winning Broadway musical A Chorus Line, the tunesmith on Carly Simon's pop hit Nobody Does It Better from the last James Bond film thriller and on Barbra Streisand's smash title song from The Way We Were. He is also the author of several major background scores. Marvin Hamlisch is therefore Hollywood's first real superstar composer -but he lives in New York. Although he spends a good deal of working time in California, he makes frequent trips back to the East Coast. He explained why when I talked to him in his Manhattan apartment recently.

"Of course I have to come back. I live here. Anyway, the Yankees are losing; the Yankees need me." At thirty-three, Hamlisch has scaled some heights, but he has not yet conquered *all* the peaks. Up until now he has written for some outstanding performing talents, Streisand, Simon, and Liza Minnelli among them. Now he is busy writing for a new and largely unknown singing talent: himself. He makes no claims for his vocal abilities, but, voice or no voice, he is putting together a solo album for Elektra. It is tentatively titled "How Do You Know When You Get There" and is scheduled for release in February.

"When I hit it big in the movies, I wanted to go back to my first love, the theater. When I hit it big in the theater, well, it was natural for me to want to do a club act and to go into the recording studio. Some of the best performing artists today do only their own material, so I can't write for them. I've done a good deal of club work by myself as well as with others. It's natural to be a singer/songwriter today."

AMLISCH muses about the media. "You can do the most tremendous scoring for films but it's the title song that counts. Film is unlike the theater, where you don't need a hit song to be successful. Writing a hit song gives instant gratification, instant celebrityaround the world in three months and all that. I love it, but I don't know if the rewards are everything they're cracked up to be. Musical shows have longevity; a good show goes on in music history forever. Writing for the theater is also artistically satisfying even though it's not really your show, you're not really in total artistic command. A good theater composer is always working toward the total success of the show, he's not just on his own musical trip.'' Was he talking specifically about A *Chorus Line*—a successful show that, nevertheless, lacked a real hit song?

"Shows don't have hit songs much any more because show music usually doesn't have that strong rhythm which will get the music onto the pop stations; rock is just not a really theatrical rhythm. Also, you can't do in the pit what you can do in the modern recording studio—you can't get that sound."

In the theater, he works from a concept—"what the song will do for us, what the theatrical context will be." In a non-theatrical situation, he usually works from a single line—the title or refrain. In both cases, his lyricists fill in the words to the music that Hamlisch has written around the basic idea.

Hamlisch might be described as a kind of musical Woody Allen, a com-



parison somewhat sharpened by the fact that he has lost a lot of weight in the last two or three years. He talks about himself with a mixture of deprecation and a tremendous, natural egotism. He is laid-back, extraordinarily adroit and versatile in his field, and very much a New York City product.

A typical Allenesque incident which dramatizes Hamlisch's adroitness and found him literally laid-back occurred about two years ago. Hamlisch had written a score for The Entertainer, a show starring Ray Bolger to be broadcast here on NBC and also in England and Australia. Bolger was required to sing and accompany himself on the piano in one scene. Although the scene had been well rehearsed, he got last-minute cold feet during the taping. Not trusting his own pianistic abilities, Bolger refused to play. With no second piano available to be played off stage, and with time as usual a precious commodity, Hamlisch came up with a clever but kinky solution. He stretched out on the floor beneath the piano and reached up to the keyboard, managing to play from this position flat on his back. Bolger, seated at the piano the while, mimed the hand motions and sang while the camera was maneuvered to film the scene leaving Hamlisch out.

**W**ARVIN HAMLISCH started early as a child prodigy who entered Juilliard at the age of seven and spent eleven years there. He had-and still has-the kind of natural musicality that retains everything and recapitulates it all on demand: hence his chameleon-like musical nature, or, if you prefer, that taperecorder brain. His classical training from Juilliard did not really take, because Hamlisch's nervous temperament did not suit him to become a performer of other people's music. His own preference in music was, from an early age, pop, and his plunge into the business resembled the career of a Tin Pan Alley composer of fifty years ago.

After he left Juilliard, he took a degree at Queens College in New York, where he studied theory and modern music, but his heart was elsewhere. At sixteen he wrote a hit song for Lesley Gore; at eighteen he was the rehearsal pianist for the *Bell Telephone Hour* and arranger for a Broadway turkey by the name of *Henry Sweet Henry*. (The director was George Roy Hill, later director of *The Sting*, and the choreographer was Michael Bennett, later the creator of *A Chorus Line*.)

The real break came when Hamlisch played for a penthouse party given by Sam Spiegel—a gig he almost turned down. Spiegel liked the way he played

october 1978<sup>-</sup>

Blue Moon and agreed to audition a song of Hamlisch's for the theme of a new Burt Lancaster movie. He liked it and hired him to write the score. Hamlisch moved with quick and easy success into the Hollywood film scene and wrote a succession of scores, including those of two Woody Allen films<sup>-</sup> plus *The Way We Were* and *The Sting*, the last two earning him Academy Awards.

The Sting is a slightly ticklish subject since Hamlisch won the award for a score that was not strictly original, but an adaptation of the music of Scott Joplin, which was at the time making a long-delayed and richly deserved comeback. Hamlisch defends himself by arguing that he has always given Joplin due credit. A Chorus Line followed and then the hit song from The Spy Who Loved Me. "Nothing like a movie to create an instant musical smash," he says.

VILL he go back to the theater? Of course, and soon. Hamlisch and good – friend and lyricist Carole Bayer Sager are collaborating on the score for a new show written by Broadway's darling, Neil Simon. Called, appropriately enough, *They're Playing Our Song*, the musical is directed by Robert Moore and will open in February, about the same time Hamlisch's new album should appear.

How about the movies? Of course. He's working on a soundtrack for *Ice Castles*, a film about an ice skater. It provides lots of musical opportunities, almost like a ballet—and of course Hamlisch would like to compose one of those some day too. He's also providing the music for the upcoming film version of the long-running Broadway comedy *Same Time Next Year*.

Finding himself with time to spare despite all this film, theater, and recording activity, Hamlisch recently took on a monumental task. Not only did he perform with the Los Angeles Philharmonic for two evenings in early September, but he also conducted and arranged the entire program. The first half of each concert was in the "Hamlisch's Greatest Hits" format, while the second featured material from his upcoming album.

He would like to write more for theater, but the logistics and economics of the contemporary musical theater make it impossible.

> New York, March I, 1975: A backstage autograph session at New York City's Uris Theater where Hamlisch picked up two Grammy awards.

• "When you do film scores, you do one after the other. That's good, because if you're a writer, you want to write. I would like to have been around in the old days of Arlen, Gershwin, and Porter; they would do one or twoshows a year plus write for revues. Look at me—I have a hit show and then I have to wait three years for another crack at it. When you wait so long, the pressure on the next one really builds up, and that's not good."

AMLISCH takes justifiable pride in his versatility. He sees himself as a kind of musical technician who can turn out anything as required and, furthermore, turn it into instant gold. He even boasts of his ability to—dread word—compromise; that is, to shape any idea of his own into exactly what is needed. And yet, underneath he has a very definite image of himself as an old-fashioned pop-song romantic.

"I believe," he says with more than a trace of fervor, "in making people cry, in strong melody, in the old changes. Some people think G7 to C is horrendous, passé. I think G7 to C can be wonderful." His method is simple: write a strong, traditional melody and then give it a contemporary beat. The beat gets it on the radio and out to the millions; the strong, traditional underpinnings give it—or so he hopes—a chance for longevity.

"You see," he confides, "I really want to write *standards*, not just the hit of the moment."

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## TIME-DELAY SYSTEMS

Over the last two years a new category of audio component has appeared on the market: the time-delay system. First introduced by Sound Concepts and Audio/Pulse, it immediately won wide acceptance among advanced audiophiles. Six more manufacturers have now introduced time-delay units, and more may enter the field in months to come.

What is the purpose of delaying an audio signal? How does such delay improve the fidelity of reproduced musical sound—if, in fact, it does? How do time-delay units work? How do you use them? What are the principal differences between the various units on the market? Though none of these questions have short answers, it is possible to develop a rough understanding of what time delay is designed to do and how it does it through a comparatively brief examination of the subject.

#### The Underlying Theory

It is sometimes supposed that the objective of high fidelity is to "bring the musicians into the listening room," and, indeed, there are some kinds of music with which this would be appropriate: a solo folk singer, a string quartet, or a piano, if reproduced perfectly, would sound right at home in the living room. But a symphony orchestra, a rock band, a pipe organ, or a Handelian chorus would not. Even if you could fit

By Peter W. Mitchell

such sound sources into a normal-size living room physically, they would not sound good there. The pleasure we take in hearing these sound sources depends critically on the acoustical character of the environments in which we hear them. So, in reproducing these kinds of music, the objective is to create the illusion that the listener is present in the environment where the music is taking place—in a nightclub with a jazz combo, in a concert hall with an orchestra, in a cathedral with a pipe organ and chorus.

When you hear live music—whether in a nightclub or a concert hall—only a small part of the sound comes *directly* from the stage to you. Most of it goes everywhere else—toward the stage paneling, up to the ceiling, out to the walls of the hall—and these surfaces ...TIME DELAY

are at least partially reflective. The live-performance environment therefore bathes the audience area in reflections from almost every direction and available surface—walls, balconies, columns, ceiling, and even the floor. Depending on the reflectivity of these surfaces, the sound may stay alive in the air, bouncing from reflective surface to surface, for as long as a second or more before the reverberations fade away into inaudibility.

Two important differences distinguish reflected sounds from direct

sounds: (1) reflected sounds arrive at the listener's ear from all directionsfrom the sides, from above, and from behind-while direct sounds arrive only from in front; (2) direct sounds arrive at the listener's ear first, while reflected sounds arrive after delays of some milliseconds. Sound travels through air at a speed of approximately one foot per millisecond (0.001 second), so a reflected sound which travels an extra distance of, say, 20 feet arrives approximately 20 milliseconds later than a direct sound. Both of these characteristics relate to a special aspect of human hearing and affect our perception of sound.

How does the ear respond to the arrival of direct and reflected sounds from differing directions? In controlled

experiments listeners have been exposed to a primary sound in front plus secondary sounds arriving from various angles-in front, from the sides, and from behind. The figure on page 91 (box) shows how strong a secondary sound has to be in various locations in order to be audible over the primary sound coming from the front. Those arrivals from in front or in back of a listener must be nearly as strong as the direct primary sound or they will be "masked." But if the secondary sound arrives from any direction to the sides of the listener, it can be quite weak and still be audible. Therefore, when we hear live music in any acoustical environment, the front-to-back reflections are largely masked by the direct sound from the stage, but the many lateral re-

CONSUMER A	UDIO T	IME-I	DELAY	SYS	TEN	ЛS		
Manufacturer	Hode Hames	Aque	nised Type of	Long	at mina con	onds Range namic Rash	or ob ob	inter of aus events inter and a series in the series in th
Analog & Digital Systems, Wilmington, Mass. 01887	ADS 10 Acoustic Dimension Synthesizer	\$995 <sup>1</sup>	Delta mod. with shift registers	100	80	13	3	High
Advent Corp., Cambridge, Mass. 02139	Model 500 SoundSpace Control	\$600	PCM with RAM	99	80	See note	2	High
Audio/Pulse, Inc., Div. Gould, Inc., El Monte, Calif. 91731	Model One	\$700	Delta mod. with shift registers	94	65	8	4	High
	Model Two	\$540 <sup>2</sup>	Delta mod. with RAM	94	80	10	3	Medium
Bozak, Inc., Norwalk, Conn. 06854	Model 902	\$9 <b>7</b> 5³	Bucket brigade	120	70	Se <mark>e</mark> note	1	Low
Phase Linear Corp., Lynnwood, Wash. 98036	Model 6000	<mark>\$600</mark>	Bucket brigade	90	88	See note	2	Medium
Scientific Audio Electronics, Inc. (SAE), Los Angeles, Calif. 90012	Model 4100	\$500	Bucket brigade	50	60	5	3	Medium
Sound Concepts, Inc., Brookline, Mass. 02146	SD-550	\$675	Bucket brigade	100⁴	90	9	1	Low
	Concert Machine	\$300	Bucket brigade	70	64	6	1	Low
Southwest Technical Products Corp., San Antonio, Texas 78216	2AS/A	\$250 (kit)	Bucket brigade	100	485	5.5	3	Medium

\*Except where specified, prices include only the delay unit; a second pair of speakers and stereo amplifier are required, typically raising the system cost by \$200 to \$400. \*Provision of multiple initial delays maintains Haas-effect fusion with long delay and increases echo density in the reverberation.

flections can be rather weak and still contribute to our perception of the sound field.

Of course, if a reflected sound arrives a long enough time after the original sound, we will hear it as a separate echo no matter what direction it comes from. But at shorter delay times an important process called "fusion" occurs. The ear has a short-term memory in which each sound is stored for about 1/20 of a second (50 milliseconds) and is compared with succeeding sounds. Whenever two similar sounds arrive less than 50 milliseconds apart, they are "fused" in the brain into a single sound which is perceived as coming from the direction of the first-arriving sound. This is called the "precedence" or Haas effect. (Continued overleaf)

Notes
<sup>1</sup> Price includes 100-watt/channel amplifier and pair of L10 loudspeakers. Features: selectable bandwidth,
voice-canceling reverb, six-channel mode, ran-
domized (between channels) output, front delay mix.
Full-bandwidth output (delayed to 7 kHz with unde-
layed higher frequencies mixed in) Bass and treble
controls. Reverb echo density converges to reduce flutter-echo.
Randomized (between channels) outputs. Optional
six-channel or eight-channel operation. Contour (bass boost) control. Front delay mix.
boosi control. Hone delay mix.
<sup>2</sup> Price includes 25-watt/channel amplifier. Randomized
(between channels) outputs. Bass and treble controls.
<sup>3</sup> Price includes 35-watt/channel amplifier and pair of
speakers; Model 901 without amplifier and speakers
available for \$625. Bandwidth varies from 2 to 7 kHz depending on delay and treble-contour settings.
Output includes short delay with 8-kHz bandwidth mixed with long delay at 3-kHz bandwidth. Includes
spring reverberator for long delay (up to 4 seconds).
Variable front delay mix. Direct feed-through for de-
coded four-channel signals.
<sup>4</sup> In mono; 50 milliseconds in stereo. Variable front delay
mix, treble control, optional direct feed-through for de-
coded four-channel signals. Available as SD 550R with rack-mounting panel.
For automobile/mobile applications. Price includes 7-
watt/channel amplifier. Remote control (\$40) optional.
<sup>5</sup> Noise figure not weighted; may include ultrasonic
Noise figure not weighted; may include ultrasonic clock leakage. Unit available only as mail-order kit for experienced builders. Direct/delay mixing. Clock has

#### HOW TO DELAY AN AUDIO SIGNAL

N any real acoustic space the reflected ambiance sounds arrive at the listener's ear slightly later than the direct sounds from the stage. In electronically recreating the experience of being in an acoustic space, we cannot delay an electronic signal by reducing its speed; in electronics, signals usually travel through a circuit at the speed of light or they don't travel at all. So we must stop each signal, "quick-freeze" and store it briefly, and then release it without altering its character or quality. Two quite different means of accomplishing this became available to audio designers at about the same time. One involves digital circuitry; the other, more-or-less unconventional analog circuits.

• Digital: This operation is accomplished by encoding the audio signal into digital form (that is, into a series of pulses and "non-pulses"). The audio signal itself is not delayed-only the pulses, which contain a coded representation of the audio signal. Either of two coding techniques may be used. In PCM (pulsecode modulation), groups of pulses and non-pulses comprise binary numbers (made up of 1's and 0's) expressing the amplitude of the audio waveform voltage from instant to instant. In DM (delta modulation), pulses are produced in a continuous series rather than in groups, and the order of the pulses represents the moment-to-moment changes in the audio-waveform voltage.

In either case, the resulting pulses are fed into a "memory"-digital storage cells like those used in computers. Here, either of two kinds of storage may be used. In the first type, a "serial shift register," the cells are lined up in a row; each pulse enters the first cell, is then shifted into the second cell while another pulse enters the first, and so on. Since the cells are connected in series, the pulses emerge from the last cell in the same order as they entered the first. The second type of digital storage is the "random-access memory"; as its name implies, the RAM gives the designer greater flexibility, since pulses can be retrieved from any cell. When the pulses emerge from the digital memory, they go through a digital-to-analog converter that re-creates the audio signal.

• Analog: This approach employs an integrated-circuit device specifically designed for signal-delay purposes: it is called an "analog shift register" or, more familiarly, a "bucket brigade." Instead of sending a digital pulse code into a memory as a representation of the audio, in this approach the audio signal itself is chopped into fine bits which are fed through a serial shift register. When the bits emerge at the other end they are reassembled into the audio waveform.

In essence, a bucket-brigade IC consists of hundreds of tiny capacitors functioning as storage cells for small packets of electronic charge. Beyond that, operation is basically that of a serial shift register (see above)—or like a row of firefighters handing buckets of water down the line to the fire.

N both analog and digital delay lines, the length of the delay is determined by two factors: (1) the number of storage cells in the memory and (2) the speed of the electronic "clock" that moves signals from cell to cell. In some time-delay units a front-panel control enables the clock speed to be varied to change the delay times; in other designs, output taps at various points in the memory provide a selection of delays.

The cell-to-cell signal transfer is not perfect; with each shift a bit of signal is lost. Thus, a potential problem is that frequency response and signal-to-noise ratio may be noticeably poorer as the delay length is increased. In a digital delay line, imperfections in the pulses don't matter; as long as the pattern of the pulses is recognizable, the decoder will reconstruct the whole audio signal with the same quality at all delay lengths. (Of course this advantage in the digital approach may be offset if limitations in the decoder add noise or distortion to all of the reconstructed signals.) Thus, in both analog and digital circuits, canny engi-



neering is required in order to obtain audibly good results, and "compander" noise-reduction systems essentially similar in principle to the Dolby B technique are therefore normally built into consumer time-delay devices, adding that much more to their complexity.

This complexity is one of the reasons that any hopes for dramatic decreases in the prices of time-delay units are probably unjustified for the foreseeable future. The technology required to make a complete time-delay unit in one integrated circuit (IC) is still at least several years away from being perfected. A typical digital delay line may use as many as thirty IC's for its memory alone, and additional IC's will be required for the digital converters, the electronic "clock," and the analog audio circuits, plus whatever noise reduction is employed.





#### THIS MONTH'S COVER

Time-delay units: (1) Sound Concepts Concert Machine; (2) Audio/Pulse Model Two; (3) ADS 10 Acoustic Dimension Synthesizer; (4) Phase Linear Model 6000; (5) Bozak Model 900 (superseded by Model 902); (6) Southwest Technical Products 2AS/A; (7) Audio/Pulse Model One; (80) SAE Model 4100; (9) Advent SoundSpace Control; (10) Sound Concepts SD550. Photographed at the Vanderbilt Museum, Centerport, New York.

When live music is heard in a large acoustical space, the cumulative strength of the dozens of reflected sounds reaching the listener's ear during each note may exceed the strength of the direct sound from the stage. But because the reflected sounds arrive later than the direct sound, we are often not conscious of them (although longdelayed reflections will be consciously perceived as a reverberant "tail" to the sound). Those delayed, reflected sounds that arrive less than 50 milliseconds after the direct sound (or after each other) fuse with the direct sound of each note of music, adding loudness, fullness, and three-dimensional "depth" to the perceived sound. These are the special qualities that a concert hall or other large space can lend to music and that a small listening room cannot.

This three-dimensionality, so familiar in live performances, has largely eluded audiophiles and their reproduced music for years. What makes it so difficult to attain? Mono and even stereo reproduction are unsuccessful in providing it, for reasons suggested by the figure on the facing page. Although mono and stereo recordings frequently contain a wealth of ambiance information, in playback it will come—along with the direct content—from the speaker or speakers up front, where it is most subject to masking. Increasing the recording's reverberant content in an attempt to "unmask" it is no help; the sound becomes cavernous and even more remote from the listener, whereas the real object is somehow to get the listener acoustically *into* the auditorium with the performers.

As has been known for at least a decade, this "vou-are-there" illusion can be fully achieved only by enveloping the listener with an ambiant sound field, and several approaches are possible. Binaural sound, specially recorded for reproduction through headphones, can be brilliantly effective. Four-channel sound was originally an attempt to bring about this listener envelopment with loudspeakers and special recordings. At its best it was-and is-quite effective (unfortunately, four-channel became embroiled in controversies largely peripheral to its ambiancecreating abilities). In addition, there have been special loudspeakers designed to propagate ambiance within typical listening rooms, and, largely as a fall-out from four-channel, various techniques have been devised for extracting or synthesizing ambiant information from conventional recorded material. These extraction/synthesis schemes can work well, particularly when additional rear (or side) speakers are used to handle the derived signals. But they depend totally on the content of the recordings used, and some programs do not have enough out-of-phase ambiant information to yield much of an effect at all. The credibility of the result is also affected by the placement of the ambiance speakers. If they are too close to you, the precedence effect may occasionally cause them to be heard as the primary sound source, thus disastrously confusing the spatial presentation. In some listening rooms it may not be possible, of course, to place them at a sufficient distance, but there is a solution: the introduction of time delay can accomplish exactly the same thing as locating the ambiance speakers at the necessary distance. It can also accomplish other things, as we shall see.

#### What Time Delay Does

When evaluating the time-delay units on the market it is helpful to remember that there are two distinctly different design goals which their designers may be trying to achieve: ambiance *recovery* or ambiance *synthesis*.

In 1970 E. R. Madsen announced a

#### USING A TIME-DELAY SYSTEM

OPTIMIZING the performance of any one time-delay system obviously depends on the circuit design and what controls are available, but there are some few general principles that apply to all of them.

 Installation: Though it is electrically possible to connect some of the delay units through the tape-monitor loop of an amplifier or receiver, they are most conveniently connected between the preamplifier and the power amplifier or between the "preamp-out" and "mainin" jacks of modern receivers and integrated amplifiers. The delay unit accepts the signal from the control preamp and provides separate outputs to the front and rear amplifiers. Just about any amplifier with adequate power output can serve for the rear speakers, and some delay units have suitable rear amplifiers built in.

With this arrangement, the rear volume control on the time-delay unit simply adjusts the *relative balance* between front (direct) and rear (delayed) sounds; once set, it should not need frequent readjusting. The main amplifier's volume control becomes a 'master'' volume control for the entire system, raising and lowering the level of all four speakers simultaneously. Similarly, the tone controls affect the signals to all speakers equally, and the same is true of any equalizer or dynamic processor connected to a tape-monitor or external-processor loop of the system.

• Choosing amplifier and speakers: Delay-channel speakers should not call attention to themselves with a brilliant sonic personality. Indeed, since they are not intended to be noticed as sound sources at all but are rather stand-ins for the walls of the acoustical environment where the recording was made, a neutral personality is preferred. Most important, the delay-channel speakers should have a smooth mid-range, preferably similar in overall balance to the mid-range of your main stereo speakers, so that the deaved sounds will blend in well. Extended deep-bass and top-treble response is usually irrelevant, but the bass-reinforcement potential of time-delay will be best realized if the speakers are not conspicuously bass-shy. Finally, the delay-channel speakers should have fairly wide dispersion, thus creating a uniform ambiant field rather than beaming their output at the listener.

How much power is needed for the delay channels? People disagree. Some users report satisfaction with 15-watt-perchannel secondary amplifiers. Several discovery that had also been made independently by others: that the natural hall ambiance contained in many stereo (and even mono) recordings, which in normal playback is "hidden" from us by the masking phenomenon, can be revealed and reconstructed in the listening room with startling realism simply by delaying the sound and playing it through loudspeakers located at the sides of the room. By using an electronic delay system, the secondary channels can be delayed by 30 milliseconds, 50 milliseconds, or even more, with a corresponding enlargement of the perceived "space" in which the performance takes place. This is a much greater delay than could be achieved in any domestic listening room by distant speaker placement.

Note that at delays longer than 50 milliseconds or so, Haas-effect fusion may no longer occur, and the delayed sound may be heard as a distracting slap-back echo. Therefore, when longer delays are set up (for cathedral-like spaciousness), some designers arrange that the delay line be "tapped" so as to provide additional shorter delays. This will avoid sonic gaps exceeding the psychoacoustic fusion limit, and it is one of the reasons why the majority of

delay units provide two to four "initial" delays rather than one. Of course, when playing slow, sustained music this consideration is not important.

The "ambiance extraction" technique can yield an effect far beyond what you'd expect, but it is successful only when there actually is natural ambiance contained in the recording. You can expect to find such ambiance in most recordings of classical music, some jazz-band discs, and on-location "live-performance" recordings of all kinds of music. But many popular recordings are quite "dry," having been studio-produced in such a way as to eliminate authentic ambiance entirely. Delay will deepen and enrich such sound, but if you want to open it up, to effectively move the musicians out of the dry studio into a more acoustically spacious locale, then more processing is required. To create this larger ambiance, many delay units are designed to add synthesized reverberation as well as time delay.

Reverberation effects can be generated by feeding the output of a delay line back to its input so that the signal is recycled back through the delay, at increasingly lower levels, until it simply fades away. All of the available delay units contain this feature, usually with the feedback going to the opposite channel to simulate lateral reflections bouncing back and forth. This type of reverberation must be used conservatively if a natural effect is to be preserved; if turned up to a clearly audible level, simple electronic reverb has a characteristic hard, "twangy" sound.

But various tricks can be used by designers to improve the realism of synthesized reverberation. They can recycle multiple initial delays (rather than one) and arrange the various delay lengths so that, when recycled, they pile up on one another and yield a naturally high "echo density." Or they can make the delay irregular or random to avoid the "flutter echo" twang or chatter caused by evenly spaced delays. Finally, it is possible to make the outputs incoherent (unrelated to each other in phase or in time), thus enhancing the sense of spaciousness. Sometimes mechanical reverberation devices are resorted to-springs, for example.

As you can see from the table of *home* (rather than *professional*) timedelay units on page 88, designers have employed a variety of approaches to synthesized reverberation. For example, the Sound Concepts and Bozak

manufacturers recommend that the secondary amplifier have at least one-fourth to one-half the power output of the main stereo amplifier. And two manufacturers insist that you may need fully as much power for the delay channels as you do for your main stereo channels—especially if the time-delay speakers are less efficient than the main stereo pair, as they may be if they are smaller.

• Setting the delay-channel level: There are various ways of judging how loud to play the delayed channels. At first you will probably run them unnaturally loud to revel in the big, spacious sound. Then, as you become accustomed to hearing the sound of acoustic space around you, a lower level will seem more "right." A simple guide is to turn up the delayed channels until the rear speakers become audible as distinct sound sources. Then slowly turn down the rear-output level until the rear speakers disappear into the ambiant field-and stop. If you have any doubt about whether the rear speakers. are really contributing anything important, switch them off and you will hear the three-dimensional ambiant sound field collapse toward the front wall.

• Speaker placement: The acccompanying figure suggests that the optimum location for ambiant-field loudspeakers is at the sides of the room at an azimuthal angle approximately 90 to 120 degrees away from the front on each side. However, the speakers will still be effective over a rather broad range of angular locations extending from 45 to 150 degrees. The only locations to avoid are those directly in front of and directly behind the listener (the peaked colored areas).



Least masking of ambiant sound occurs if speakers are to the sides.

Unless the speakers are truly omnidirectional, speaker aiming can also affect the results. It is unrealistic to expect that a single pair of delayed-channel speakers can be a perfect stand-in for all of the reflecting surfaces in a night club or a concert hall (a six-speaker delay system, for those who can manage it, is certainly better than a four-speaker system). But if you can arrange your delayed-channel loudspeakers to scatter their sound uniformly around in the room so that the delayed sounds arrive at your ears from all directions, then you will substantially improve the realism of the ambiant-field illusion. Experiment with aiming the speakers diagonally upward or rearward so as to bounce their sound off walls and ceiling. And remember that a time-delay system will in most cases sound more realistic at home than in a showroom, because of the absorbing materials and acoustic-tile ceiling commonly found in stores.

• Suitable recordings: A time-delay system is a device for improving the realism of good recorded sound. It is not a substitute for good recordings. Especially with delay systems intended mainly for ambiance extraction rather than ambiance synthesis, the realism of the final result depends very much on the quality of the ambiance information hidden in the recording. With all time-delay systems, the most thrillingly realistic results are obtained with recordings made in good acoustical environments with "honest" stereo recording techniques. Live concert tapes are most consistently impressive with time delay; the quality of threedimensional realism they deliver must be heard to be believed.

...TIME DELAY

units are intended primarily for recorded-ambiance *extraction*, while the Audio/Pulse and Phase Linear units have a relatively higher proportion of their circuitry devoted to the creation of reverberation (ambiance *synthesis*).

In general, both goals—ambiance recovery and ambiance synthesis—are valid, and both are well served in the various time-delay models available. In most cases the operating controls have sufficient flexibility to deal with the available range of recordings. With some recordings (made in good acoustical environments) it is best to turn off the synthesized reverberation and use pure delay to provide the natural ambiance and three-dimensional realism. With most recordings, however, experience shows that a blend of both approaches yields optimum results: initial delay to extract the hidden threedimensionality in the recording, plus a modest amount of delayed reverberation to enrich and extend the recorded ambiance, placing it in natural acoustic perspective around the listener.

Some of the features in time-delay units may not have an immediately evident purpose and therefore deserve comment:

• Front delay mix involves mixing some delayed reverberation into the front speakers to add depth and realism to mono discs.

• Low coherence refers to the fact that in ambiance synthesis the added reverberation can tend to sound quasi-monophonic if the two reverberation channels have identical characteristics. Appropriate circuitry can be used to alter one or both channels, resulting in an incoherence that is more spacious and diffuse in quality. • Tone controls. As can be seen in the comparative table of units, designers have not agreed on a standard high-frequency bandwidth limit for delay systems, in part because of cost (reduced delay bandwidth is cheaper) and in part because the desired bandwidth seems to depend on the recording being played. A treble control on the delayed sound provides useful flexibility. Tone controls also help in matching the sound of dissimilar front and rear speaker systems.

Incidentally, although Acoustic Research is not currently marketing a consumer delay unit, two other manufacturers are already applying a clever trick discovered by psychoacoustician Paul Milner while using AR's experimental sixteen-channel delay system: if the delayed sound has a bandwidth of at least 6,000 Hz, undelayed higher frequencies can be mixed into the rear channels to extend the effective bandwidth without causing psychoacoustic confusion in localization.

#### THE AUDIBLE BENEFITS OF TIME DELAY

**T**HE effect of a time-delay system on the quality of reproduced sound is both dramatic and subtle. It is most dramatic when the delay system is switched off and the entire three-dimensional ambiant sound field appears to collapse into the front wall of the listening room. The delayed sound does not call attention to itself when it is on, but listeners experience a profound sense of sonic deprivation when it is removed. The sound of conventional two-channel stereo seems flat, dull, and artificial by comparison.

On the other hand, switching on the delay system does not produce an immediate blaze of sonic glory to reward your investment. Typically, it yields a gradually perceived "rightness" of sonic texture and an apparently expanded listening space. The effect of the delay is simply too natural to be spectacular. If you walk into a room where a properly adjusted time-delay system is in use, you may not even be aware of its presence. Everything simply sounds uncommonly realistic.

Some delay units, of course, can be made to be quite spectacular. By cranking up the longest delays, wide bandwidths, maximum reverberation, and increased delay-channel levels, thrillingly huge spaces can be simulated. The experience of hearing an enormous cathedral echoing around one's head while one sits in a cozy living room is not soon forgotten. But most listeners find that after the first week or two they adopt more conservative settings of all of the controls, producing a system sound that is unobtrusively natural.

The first thing you may notice is the way time delay "opens up" reproduced sound, giving it an unconstricted, airy, unboxy, spatially free quality. The sense that the musical sound is alive in the air all around you, rather than simply being projected at you from a box, goes a long way toward establishing that elusive sense of uncompromised realism audiophiles yearn for. In acoustics this is called "envelopment," the sense of being immersed in the sound field.



More astonishing is the way timedelay adds depth and three-dimensional realism to the stereo image *in front* of you. Even though time-delay systems normally do not affect the signal going to the front stereo speakers in any way, the presentation of ambiance to the ears from side-oriented speakers transforms the perceived character of the front stereo image as well. Voices and instruments become rounded, three-dimensional, with increased stage depth behind them and even an improved separation of details in some recordings.

Although time delay is in no sense a substitute for a dynamic-range expander, it has a surprising effect on perceived musical dynamics. It is well known that nonlinear distortion of an audio signal produces a sense of psychological strain that affects the perceived loudness of reproduced sounds. It may be that the spatial distortion of two-channel stereo has a similar effect. Whatever the cause, listeners report that by reproducing a three-dimensional ambiant field around the listener, the time delay produces a sensation of "presence," punch, and dynamic impact that loudness alone never quite provides. The sense of presence and depth remains convincing at low levels as well, a boon for late-night listening. In fact, many listeners find the differences between ordinary stereo and time-delayed ambiant stereo even more strikingly dramatic at modest listening levels than when the ears are being overwhelmed with sonic power.

The final (and for some listeners most valuable) benefit of time delay is that it restores an unexpected degree of solid realism to the reproduction of low frequencies. In most listening rooms the distribution of bass energy is quite uneven due to "standing waves" which produce peaks and valleys in the bass response of the system. The common practice of locating both stereo speakers along the same wall reinforces these aberrations. But adding time-delayed bass energy at the sides of the room tends to even out the standing waves, with a palpable increase in low-bass definition and power. Surprisingly, this occurs even with loudspeakers having limited low-frequency response.

## 'I know why I smoke'.

"There's only one reason I ever smcked. Good taste.

"So when I switched to low tar, I wasn't about to give that up. If you don't smoke for taste

"But there was all that talk about tar. "Unfortunately, most low tar cigarettes tasted like nothing. Then I tried Vantage.

"Vantage gives me the taste I enjoy. And the low tar I've been looking for."

Vince Dougherty Philadelphia, Pa.



Regular, Menthol, and Vantage 100's

FILTER 100's: 10 mg. "tar", 0.8 mg. nicotine, FILTER, MENTHOL: 11 mg. "tar", 0.8 mg. nicotine, av. per cigarette, FTC Report MAY '78.

Warning : The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

#### DEAR STEVE:

While attending a Hot Tuna concert in 1970. I ingested several Ouaaludes and a bottle of Boone's Farm wine, fell down a flight of stairs, and smacked my head into the knee of a nearby usher. As a result, I was in a coma until just three months ago. Upon awakening, I found much had changed (apparently I missed the Revolution), so I had to catch up on my reading (fortunately I have a life-time subscription to STEREO REVIEW, and all my back issues were piled neatly by my respirator). I am readjusting to contemporary life fairly well, but one thing does have me confused. I keep coming across references to some kind of music called either punk rock or New Wave. What is it? Should I like it? And why don't they play it on the Ed Sullivan Show?

Power to the Opposite Field, Trippy Van Winkle

Sleepy Hollow General Hospital Tarrytown, N.Y. still shows no sign of abating and the species has not yet defined itself. But if you want to get a handle on what all the yammer is about, I hope my comments will serve your purposes—or at least make a little light reading while you're still in the hospital.

HE first thing you should understand is that punk, like rock itself, means many things to many people, and although for a short time it may have had circumscribed, definable limits, that's no longer true. In fact, the term "punk rock" is by now as nearly meaningless as, say. "Romanticism." It is useful only in that it allows for easy, inexact classification of numerous musicians of widely divergent attitudes and stylistic persuasions. However, punk did not spring full grown out of the air. Like Alex Haley, it too has roots. The difference is that his were in Africa, while punk's were in Hollywood.

"Spiritually," and especially as a *visual* style, punk began in the movies in the early Fifties with James Dean

most incredibly moronic three-chord hit Louie Louie is even now the true test of a rock fan, the easiest way to separate the men from the dilettantes. Loud, raucous, stupid, flouting all known canons of good taste, this school remained pretty much a regional phenomenon, but through the great success of the Kingsmen's quintessential garage record, it made an indelible impression, for good or ill, on anyone who came into contact with it at an impressionable age.

Later on, fledgling rock critics began using "punk" to describe the music made by a whole slew of groups who, in the wake of the British invasion, had formed their own garage ensembles, gone on to become local sensations, and released various one-shot hits emulating (poorly, in most cases) their British betters before returning to the just obscurity of history. The seminal punk band in that regard was Chicago's Shadows of Knight, who looked like the Stones and sounded like the Yardbirds with arthritis, but just about ev-



#### DEAR TRIPPY:

Glad to hear you're recovering. As to your last question, sorry to break it to you so brutally, but not only has the Sullivan Show been canceled, Ed himself is now hosting the Great Variety Show in the Sky (one assumes Elvis is a frequent guest, and that God is not as offended by his bump and grind as the CBS censors were in 1957).

Your other questions, however, require fuller explanation, and consequently I'm going to share my reply with STEREO REVIEW's readers. I hope you don't mind. While I'm sure that many of them are indeed aware that a motley crew of musical Visigoths has been making noises at the gate of the Rock Establishment for the last few years, it's likely that at least a couple of them may think the term "New Wave" refers to French art films of the early Sixties or that a punk is something little kids smoke behind the barn. The following explanation of punk is in no way definitive since the horde of new bands

and Marlon Brando. It was introduced into rock-and-roll by Elvis Presley, whose demeanor in those days would most likely shock the sweet old ladies who frequent current Elvis-impersonator acts. Elvis got a lot from Dean and Brando, and it's easy to visualize him as either the misunderstood teenager of Dean's Rebel Without a Cause or as the motorcycle hood of Brando's The Wild One. Presley's resemblance to them was not lost on teenagers of the period. All of this is relevant to our discussion because the recent resurgence of interest in Fifties rockabilly, the music made by Elvis' label-mates at Sun Records, is largely owing to the fact that punk bands, especially in New York City, have rediscovered the stuff with a vengeance.

But there are other punk progenitors. As far as anybody can tell, the term "punk" was first applied to a particular school of pre-Beatles rock bands operating in the Northwest—outfits like the Sonics, the early Paul Revere, and most of all the Kingsmen, whose alery high school of the period had an identical band, and if you rummage through your old 45 collection, you'll undoubtedly uncover a small-time hit waxed by some group whose members once sat in front of you in Driver Ed.

Critic Dave Marsh now claims that the very first use of the term in print came in a review he wrote of a performance by Question Mark and the Mysterians, famous for their all-time imbecilic smash 96 Tears, which had only two chords. This was a particularly influential work because of its cheapo organ sound, which reappeared later on Elvis Costello and Blondie records. At any rate, the Mysterians were clearly of the same school as the Shadows. Other notables of this genre included the Swinging Medallions (a drunken fraternity band from the Deep South), the Castaways (a Texas outfit who, if you want to listen, sound amazingly like Talking Heads), the Knickerbockers (four greasers from Bergenfield, New Jersey, whose Lies is still the best Beatles imitation of all time), and the



Barbarians (the first kids in their area, somewhere in Connecticut, to grow their hair long and the only group whose major claim to fame was a drummer with a hook for a right hand). Most of these wonderful period relics can be found collected on Sire's excellent "Nuggets" collection (Sire 3716).

But punk as an idea really became institutionalized only after the emergence of one Iggy Pop (né Stooge), who is to the New Wave roughly what James Brown is to r-&-b: the Godfather. The music on Iggy's first two albums, unlike the prevailing Woodstock Nation efforts of the day (1969-1970), sounded like the death throes of an industrial society, all fuzz-tone and wah-wah, the lyrics equal parts terminal boredom and teenage frustration. The cover pictures showed us a scuzzy bunch of leather- (or vinyl-) jacketed geeks with bad teeth working very hard at looking sullen. Iggy was canonized early on by the Detroit press corps, who saw him as the last authentic rock madman, and he was scoffed at by the editors of Rolling Stone, who saw only a pretentious third-rate Jim Morrison clone. They were both right, but no one could deny that he was some kind of (for want of a better word) phenomenon, and, as a result of his pioneering, punk rock became a useful generic description, part of our common language if not of our shared listening habits.

Around this same time, however, there were waiting in the wings two other barbarian hordes, ready to set the stage for the New Wave that now confronts us: the pub contingent in London and the glitter crew in residence at New York City's Mercer Arts Center.

New York a lot of the attitudes that have come to represent the New Wave—contempt for older bands, disregard for conventional instrumental virtuosity—were originally exemplified by the New York Dolls (and, indeed, Dolls singer David Johansen has gone on to become a sort of Grand Old Man of the current scene). Although the Dolls were identified at the time as decadent pansexuals in the tradition of such avatars as David Bowie and Lou Reed, underneath the make-up was clearly a punk band struggling to get out.

In London, things were a lot more professional. Bands like Ducks Deluxe, Brinsley Schwarz, Dr. Feelgood, and others could not only play well, but were clearly part of an ongoing main-

Debbie Harry of Blondie searches frantically for a missing pair of Dr. Dentons. (All photographs by Ebet Roberts.)



"Word went out across the country: anybody who can play three chords on a guitar can start a band."

stream rock tradition. They too, however, shared a punk attitude of "let's get back to good basic music and to hell with laser beams." Their penchant for short hair and mod clothes (check out the cover of the Feelgoods' "Down by the Jetty" to see what I mean) was an important visual influence.

But the climate wasn't yet right, and neither contingent amounted to much. The pubs dried up, and Mercer Arts fell down (the roof caved in, actually). The Dolls stiffed in Middle America (probably because of far too many extravagant claims made for them by overzealous, chauvinistic New York critics), and by the end of 1974 it seemed that it was all over. But that was an illusion. Back on New York's Lower East Side, a hundred little moron bands who had arrived too late to cash in were working feverishly to reverse the tide. One of them, the embryonic Television, convinced the owner of a decaying Bowery saloon called CBGB (short for Country, Blue Grass, and Blues) to let them loose on his tiny stage. A year later New York was the rock-and-roll capital of the world, at least in terms of media attention and sheer numbers of unrecorded working bands (some new, some Mercer Arts veterans). Word went out across the country through a teenage underground linked by fanzines and an occasional farsighted radio station: anybody who can play three chords on a guitar can start a band. Needless to say, this kind of revolutionary populist concept appealed immensely to any kid who didn't have the thousands of dollars needed to get a mainstream rock outfit on the road or who couldn't relate to the wispy banality of the stuff being foisted on us as rock-and-roll via television and most FM stations.

The big record companies were predictably slow to catch on to what was happening. Patti Smith was grabbed up first, after a *Village Voice* cover photo of her with Bob Dylan convinced Arista she was . . . um . . . legitimate. Staid Atlantic eventually took over the independently made "Live at CBGB" two-record document, and Sire, a label heretofore best known for the progressive yodeling of Focus, brought the Ramones to the world. Still, although just about all the major New York acts got record deals soon after (the Shirts waited the longest, and their album is only just now coming out), there was a certain reluctance to sell the music for what it *was*. Or, as a highly placed executive at a company which has since signed the Jam put it to me succinctly, "You can go to the toilet trying to promote punk rock."

What finally brought punk out of the dumper was the fact that English kids got wind of what was happening, and for a variety of reasons-including a pop mania that has always far exceeded ours, as well as a particularly messed-up political and economic situation-turned it into something of their own. The Ramones, who are almost a cartoon of a punk band, visited England in 1976 and were totally misinterpreted. Instead of seeing them as satirists, as older veterans pretending to be pinhead hoodlums, the British took the Ramones' studied teenage cool at face value. English groups and fans latched onto the idea of punk not as entertainment or even Art, but as an alternative to the drabness of their own lives, as a way of addressing social issues and attracting attention to themselves and their problems. English punk, as it developed almost literally overnight, had an Angry Young Man undercurrent to it that was so palpably real that even some rock fans who thought the music itself fairly mediocre found themselves unaccountably responding to it. Hence, in a dizzying succession, the Sex Pistols, the Damned, the Clash, the Jam, the Buzzcocks, the Stranglers, the Vibrators, and on and on.

HIS is not to say that much of the activity was anything other than the traditional rock-and-roll game of épater les bourgeois, or shock the old fogies enough and the kids will buy your records. Punks sticking safety pins through their cheeks (a startling though certainly unintentional metaphor), reports of violence at punk clubs, and the nasty Sex Pistols saying naughty words on British television, being dumped by two record companies and banned by the BBC-all of that made for great copy. The sensationalist British newspapers ate it up, and in less than a year they turned punk into a national obsession. The bands themselves claimed self-righteously that they were above such hoary hypes. But that too is an old gambit: rule number one at rock manager's school is that a front-page headline in an evening paper is worth all the rock-press coverage in the world-but

### A HIGHLY SELECTIVE BASIC LIBRARY OF PUNK

#### The United States:

• RAMONES: Rocket to Russia (SIRE SRK 6042). The Ramones pretty much define the mainstream of American punk-loud, deliberately stupid, threechord tunes made to order for lyrics about sniffing glue and beating on the brat. Clearly, to take this at all seriously is a risky business, but lots of folks I respect do. The Ramones are humorists, they insist, and beneath the racket is an old-style New York pop sensibility. That may be true, but if they're joking I don't think they're funny enough. In a year or two, when they've moved on to dispensing Sixties folk-rock covers (an unreleased studio version of the Searchers' Needles and Pins already exists), it will prove only that they have good record collections. Relevant quote from Peppy Marchello of the Good Rats: "The Ramones respect us because we can tune our guitars.'



• MINK DeVILLE: Return to Magenta (CAPITOL SW-11780). Solid, occasionally incandescent, old-school Latin-tinged r-&-b. Before punk, we would have grouped them with the J. Geils Band. Reactionary stuff, granted, but honest, and they'll probably be around a while.

• PATTI SMITH: Horses (ARISTA AL 4066). The most commercially successful American punk so far and one of the least typical, Patti may or may not be turning into the egomaniacal monster some have predicted, but basically, as she goes so goes the movement. Recent hits notwithstanding, this remains her best album.

• TELEVISION: Adventure (ELEKTRA GE-133), RICHARD HELL & THE VOIDOIDS: Blank Generation (SIRE SRK 6037). Television, since Richard Hell's departure, has turned into a won-



derfully imaginative studio band whose live shows are, to these ears, more uneven than the Grateful Dead's. Hell's incredibly pretentious street-poet act, on the other hand, will someday seem as hilarious as Jim Morrison's acid raps.



• TUFF DARTS (SIRE SRK 6048). ROB-ERT GORDON: Fresh Fish Special (PRI-VATE STOCK PS 7008). Robert Gordon has yet to back himself out of the artistic corner of his Fifties fetish, but at least he's trying. His old band, Tuff Darts, is an obnoxious mainstream metal aggregate that peddles sexist lyrics and a stage act similar to what Sha Na Na now does on the tube. Avoid at all costs.



• TALKING HEADS: More Songs About Buildings and Food (SIRE SRK 6058). An eccentric mixture of Sixties funk and SoHo minimalism; admittedly for special tastes, but somehow it works. *Plus* Tina Weymouth, the cutest bass player in rock (sorry, guys, she's married).

• **BLONDIE:** *Plastic Letters* (CHRYSALIS CHR 1166). Deborah Harry's sex-kitten routine strikes me as more cabaret than punk, and although the band plays an intriguing mishmash of Sixties pop styles with a certain verve, the end result hardly transcends the admittedly less-thanserious sources. Good mindless fun, though.



• DEAD BOYS: Young, Loud and Snotty (SIRE SRK 6038). Some say that this adequate bar band, which four years ago was probably doing Mott the Hoople covers, is the most exciting act to emerge from the whole scene. Not me.

#### England:

• EDDIE AND THE HOTRODS: Life on the Line (ISLAND 9509). An energetic, brash young blues-based band lurching toward pop to good effect.



• ELVIS COSTELLO: This Year's Model (COLUMBIA JC 35331). The most compelling rocker out of England since John Lennon, perhaps, or merely the most interesting singer/songwriter since Warren Zevon. Decide for yourself.

• SEX PISTOLS: Never Mind the Bollocks, Here's the Sex Pistols (WARNER BROS. K-3147). I never saw these guys, and you probably didn't either, so none of us is qualified to say whether or not session cats played all this stuff. Never mind. Their rise and fall is the most amazing story in rock history. For all that, however, they are probably more important as an influence than for their music. • THE JAM: This Is the Modern World (POLYDOR 6129). Because of a couple of reasonable early Who imitations, these guys have conned a lot of people into taking them seriously as something more than a Sixties nostalgia band. Rubbish. Boring tunes, contrived social consciousness, and I pass.

• THE STRANGLERS: No More Heroes (A & M 4659). Misogyny, watered-down Doors organ licks, and a big So What. They are nonetheless currently the hottest live act in England. To me, inexplicable on all levels.





• SHAM 69: Tell Us the Truth. (SIRE SRK 6060). Okay, guys, I will: don't give up your day jobs. Punk already reduced to a formula.

• NICK LOWE: Pure Pop for Now People (COLUMBIA 35329). Somewhere between the National Lampoon and Paul McCartney, Lowe is proof positive that there is rock after Thirty. Brilliant.

• GENERATION X (CHRYSALIS CHR 1169). Their hearts are in the right place, but that's about it. Punk pretty boys for hip prepubescents.

• THE CLASH (CBS import). Most critics who've attended their live shows come away seeing God, but on record at least they veer most confusingly between the slightly ragged and the exciingly anarchic. You'd do well to wait for the American version, which will include some recent (and very fine) singles.



"Virtually all punk singers favor the most determinedly proletarian English dialects they can muster..."

don't admit it. And it *is* possible that one or two of these outfits, notably the Clash, may even have been—how you say—*sincere*.

Not that it matters. All this publicity, coupled with the fact that the Pistols' Johnny Rotten had bona fide star quality (which cannot be said of Joey Ramone) caused the London scene eventually to overshadow what had happened on New York's Bowery. As a result, many people now believe that the English invented punk in the first place. Indeed, Elvis Costello, one of the unclassifiable not-quite-punk types who has been lumped with the movement anyway, has announced with a straight face that "there's never been a decent American rock band," echoing the anti-Americanism that also runs through much of the British New Wave. The Clash, the most overtly "political" of the hard-core punk bands (guitarist Mick Jones has made pro-Red Brigade statements), do a song called (I'm So) Bored with the USA, and virtually all punk singers favor the most determinedly proletarian English dialects they can muster as a rejection

of their hippie elders' fascination with American culture (surfing, cars, even the blues).

After the official, rather sudden demise of the Sex Pistols (whose selfdestruct act was viewed by many as the ultimate expression of artistic integrity in the face of corrupt record-business pressure), English punk ceased to be controversial and was officially interred by the press. And while new young bands continue to be signed on both sides of the Atlantic, things have obviously changed. On the fashion level, the safety pins that were punk's most visible trappings now look as quaint as love beads, and more and more bands are rejecting that kind of packaging as too limiting.

F we can believe advance reports. America's industrial heartland, the Akron/Cleveland area, is where the future of the New Wave lies. Stiff Records, the independent label whose alumni include the Damned and Elvis Costello. is now readving a push behind several groups from that area. Most of them are dada-ist art-rock groups who owe far more to such vaudevillians as Captain Beefheart and King Crimson than to Iggy or Johnny Rotten. What hasn't changed, though, is that the big commercial breakthrough has still failed to occur. Very few of the hard-core punks have cracked the charts. In America, only the Ramones and Patti Smith have made it. And in England, despite number ones for the Pistols and the Stranglers, the Clash, who have received a press more unashamedly supportive than that accorded any act in recent memory, sell just moderately well.

Sales figures, however, are beside

the point. Sturgeon's Law. that 90 per cent of everything is crap, is just as true for punk as for any other new-laid music, but punk was and is something to cheer about nonetheless. A recent Forbes article on the record business pointed out that more people than ever are buying albums, but that they're all buying the same kind of music, and consequently there are no longer the specialized audiences necessary to support a small hit that is outside the mainstream. This is a depressing prospect, and punk has been the first concerted effort by people who are passionate about their music to break the stranglehold that the major labels and their bland, market-researched superstars have on our listening habits.

Certainly there's no question that punk has brought about a long-overdue re-evaluation of the relationship between rock performers and their audiences, and it has also alerted us once again to the dangers inherent in too much cozy rapport between musicians and the industry. In general it has given us all a tremendous, energetic kick in the butt. So if, as Lester Bangs suggests, rock-and-roll since Kiss and Peter Frampton has been about "the pacification of a generation which does not want to rebel against anything except the possibility of missing out on an upwardly mobile job opportunity," then punk/New Wave may well be what its most enthusiastic boosters think it is: the single most important musical development of the Seventies.

And, oh yes, Trippy—you *can* dance to it. Hope you're out of bed real soon. *Love*,

Steve Simes



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### STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT BEST OF THE MONTH





Carol Neblett (Minnie) and Placido Domingo (Dick Johnson) in La Fanciulla del West: She won him in a poker game

Puccini's Girl of the Golden West in a Smooth. **Tautly Controlled** New Performance DEUTSCHE GRAMMOPHON was wise to base its new recording of Puccini's La Fanciulla del West on the opera's 1977 Covent Garden revival. With the exception of Sherrill Milnes, the casts for the new recording and for the London stage production are identical. It is therefore not surprising that the set captures a smooth and tautly controlled performance-and La Fanciulla is just the kind of opera in which ensemble work is crucial.

Zubin Mehta's leadership was highly praised by the English critics-praise evidently deserved, for the recording testifies to his authoritative direction. There is passion and excitement here. vet the music never seems to be overdriven. Puccini's shrewdly written score has its share of surefire emotional climaxes, but Mehta manages to create an incendiary moment even out of the tense confrontation between Rance and Sonora in Act I, a scene that sometimes passes in the theater, as it has in recordings, almost without notice. Chorus and orchestra perform beautifully, and they are supported by effective production touches-faraway voices, storm effects, and other sounds of nature-that are judiciously done, without excess.

Placido Domingo seems ideally cast as Johnson/Ramerrez, the improbable bandit. His physical appearance may be against him, but that is immaterial in a recording; he finds so much poetry in this music, combines ringing tones with such melting phrasing and exemplary musicianship, that he is quite persuasive enough to win our hearts as well as Minnie's. In the role of the heroine, Carol Neblett matches a fetching presence with gleaming tones. Vocally she cannot be faulted, but the colors she uses to depict the many sides of Minnie's character are not really strong enough. Sherrill Milnes characterizes Jack Rance very well: a brooding gambler, a Wild West Scarpia without the latter's elegance but with a sense of fair play unknown to that Roman scoundrel. He is vocally impressive most of the time, though the climax of his brief aria, "Minnie, dalla mia casa," is rather effortful.

I don't know what the term "idiomatic performance" might mean in an opera in which California miners are given Italian melodies to sing, but these Covent Garden stalwarts acquit themselves nobly. If I single out Francis Egerton (Nick), Malcom King (Larkens), and Glynn Howell (Wallace) for special mention, I do it only because

the cast is too large for individual praise role by role.

Comparing this brand-new edition with London's OSA 1306, I find that the nearly twenty-year-old set holds up astonishingly well in all respects, even sonically. One can easily score a few points in favor of Domingo over the less malleable Mario del Monaco, or find Milnes more vivid in portrayal (if not necessarily in voice) than Cornell MacNeil, but the two performances are, on the whole, on the same level. The superiority of Renata Tebaldi's Minnie, however, is unchallenged in the later recording, particularly in that peerless second-act poker game. But the new set will have its partisans too, and rightly so, for it does eminent justice to a very effective opera.

#### -George Jellinek

PUCCINI: La Fanciulla del West. Carol Neblett (soprano), Minnie; Sherrill Milnes (baritone). Jack Rance; Placido Domingo (tenor), Dick Johnson; Francis Egerton (tenor), Nick; Robert Lloyd (bass), Ashby; Gwynne Howell (bass), Jake Wallace; Jonathan Summers (baritone), Sonora; Robin Leggate (tenor), Joe; Malcolm King (bass), Larkens; Paul Crook (tenor), Harry; others. Chorus and Orchestra of the Royal Opera House Covent Garden, Zubin Mehta cond. DEUTSCHE GRAMMOPHON 2709 078 three discs \$26.94, © 3371 031 \$26.94.

#### Vivaldi's *Seasons*: New Concentus Musicus Performance Outclasses Everything of Its Kind

MAY as well say it right out: Nikolaus Harnoncourt's performance of *The Four Seasons* with the Concentus Musicus of Vienna is so different and, in my opinion, so far outclasses everything of its kind that has preceded it that Vivaldi and Baroque music will just never be the same again. Of course, we all know *The Four Seasons*—the *Nutcracker* Suite of Baroque music. Or do we? As played in this new Telefunken recording, it's a very different work and a very different ball game.

The rediscovery of Baroque music BB&H (Before Bach & Handel) goes back a good many years, but it really hit big in this country in the Fifties when a pit musician by the name of Max Goberman announced that he was recording the complete works of Vivaldi; he soon had 'em lined up around the block for all-Vivaldi concerts. The revival quickly reached the point where no party was complete without a stack of Baroque records on the changer; Vivaldi, outdistancing Bach, was No. 1, and *The Four Seasons* was his flagship.

From that innocent vantage point, Vivaldi and the Baroque were the ultimate in decorative art. No matter what the program notes said, the music was played and listened to as a kind of rococo geometry—abstract, symmetrical, charming, forward-driving, and pure. The fallacies of the Romantic interpretation of eighteenth-century music were duly exposed—and the fallacies of the clean, pure, modernistic approach were substituted.

The modern, abstract, puristic approach never had anything much to do with the eighteenth century, of course. We know perfectly well that Baroque style was highly flamboyant and theatrical; the key art of the period was, after all, *opera*. Audiences everywhere understood a kind of common language of expression—the so-called "affects" in which musical figures were used to represent emotional states as well as external images. Not surprisingly, instrumental music was often highly programmatic and obviously intended to be as expressive as vocal music.

The Four Seasons are the first four of a set of twelve concertos—ten for violin and two for violin or oboe—published in Amsterdam and Paris in the

late 1720's under the collective title II Cimento dell' Armonia e dell' Inventione, a title that Nikolaus Harnoncourt translates as "bold experiments in harmony and invention." And, indeed, bold experiments is what they sound like in these performances, for Harnoncourt and his musicians have made some bold interpretive decisions. They have decided that metrical rigidity and a limited range of articulations and dynamics-the hallmarks of Baroque performance in modern times-are not called for, that Vivaldi's own score instructions point, in fact, quite clearly in the opposite direction. They articulate, they change tempos, they use multiple dynamics and dynamic changes. And they take the program seriously: the barking dog literally barks, the birds twitter, the peasants stomp, the rain patters on the roof, the ice cracks-and so does the lightning, with all the intensity of a Richard Strauss tone poem!

Not that this ever sounds like nineteenth-century Romantic music. The triumph of Harnoncourt and his musicians here is that they conjure up more eighteenth-century feeling than the hidebound chug-chug-chug performances we are generally subjected to in the names of Purity and Fidelity. The instruments are all of the period and are played in the eighteenth-century manner these musicians have studied very carefully. The pacing and forward drive are tremendous, and they are carried through all the tempo

THE CONCENTUS MUSICUS OF VIENNA: Vivaldi and Baroque music will never be the same again



changes and other interpretive twists and turns. In short, one might say that this music really *cooks*, Baroque-'n'roll style! The analogy is not as farfetched as you might think. A bit of performance-practice style with feeling and vernacular swing turns out to be the tonic (no pun intended) that should rejuvenate the aging Baroque revival.

The imaginative fantasy of The Four Seasons-fully brought out here for the first time in my hearing-obviously dominates this set, but there are many charms in the other works: the two oboe concertos, the Storm at Sea, The Hunt, Il Piacere (here translated as "Joy"), the minor-key concertos which Harnoncourt\*connects with the Commedia dell' Arte tradition. Alice Harnoncourt's performances as violin soloist are so much a part of the total feeling and conception that their occasional roughness will hardly be noticed. Oboist Jürg Schaeftlein, playing on an eighteenth-century instrument, is equally an outstanding soloist and a crucial part of this unique ensemble. The recording quality is first-rate, and the accompanying booklet includes an essay by Harnoncourt giving a very convincing explanation of his approach to the music. But, ultimately, it is not the musicological thesis, accurate though it may be, that wins the day, but the musical validity of its realization. It is not often that one hears a performance that really does turn a familiar piece of music into something fresh, exciting, and new, but that is the case here without a doubt. There have been other idiomatic and excellent recordings of *The Four Seasons* (particularly CRD 1025, reviewed in January 1977), but this one of the complete Op. 8 stands, to my mind, by itself.

–Eric Salzman

VIVALDI: Il Cimento dell' Armonia e dell' Inventione, Op. 8. Alice Harnoncourt (violin); Jürg Schaeftlein (oboe); Concentus Musicus Wien, Nikolaus Harnoncourt cond. TELEFUNKEN 6.35386-00-501 two discs \$8.98.

#### Little River Band: One of Two Rock Bands That Effectively Mix Jazz and Rock

**O**NE of the problems music journalists occasionally encounter is the problem of praise. How do you effectively salute a group (or a performer) that simply knocks you out? It is, unfortunately, much easier to tick off a band's sins and shortcomings, and when trying to do the opposite the journalist runs the risk of sounding impre-

THE LITTLE RIVER BAND: David Briggs (top left), Beeb Birtles (front), Glenn Shorrock, George McArdle, Derek Pellicci, Graham Goble



cise, insincere, or, even worse, gooey.

The reader will therefore please take this problem into consideration while I attempt to explain why the Little River Band is so bloody good. They are one of the two rock bands I've ever heard who effectively mix jazz and rock: Little River Band is Australian and the other, Motherlode, was Canadian. (Just why outlander groups should be artistically successful in mixing jazz and rock while such home-grown bands as Chicago are commercially successful with a *bad* blend escapes me.) Little River Band's arrangements and its instrumental and vocal performances are downright delicious. The ensemble sound blends like the colors in an oil slick, and the solos are beautifully conceived and delicately understated. That's for sure. But I'm not so sure whether the material itself is as good as it appears to be. Divorced from the musical performances, the lyrics tend toward the pedestrian-though the construction of the melodies shows solid workmanship. Whatever doubts may spring into my mind about the material, however, another playing of the album soon dissolves them.

Perhaps what is most appealing about the Little River Band is that they don't require the listener to work—he is neither asked nor expected to grant the group any artistic handicaps or to work himself into a preconceived emotional state before hearing the music. Little River Band is in complete control of itself and offers the listener an entertaining, fully realized, artistic package. Listen to this album and prepare to be hooked. —Joel Vance

LITTLE RIVER BAND: Sleeper Catcher. Little River Band (vocals and instrumentals). Shut Down Turn Off; Reminiscing; Red-headed Wild Flower; Light of Day; Fall from Paradise; Lady; Sanity's Side; So Many Paths; One for the Road. HARVEST SW-11783 \$7.98.

Egberto Gismonti: A Scope Far Beyond the Limits of Jazz and "Popular Music"

**B**RAZILIAN multi-instrumentalist Egberto Gismonti, who last year dazzled and delighted my ears with his first ECM album, "Dança das Cabeças," has done it again. His new release,



EGBERTO GISMONTI: Brazilian folk elements and modern jazz interwoven

"Sol Do Meio Dia"—which is dedicated to the Xingu Indians of the Amazon basin and their chief, Sapain, who taught Gismonti to play the flute and was his guide through the jungle—is a triumph against modern technology (that is, all that electronic funk pap some record companies seem bent on grinding out these days), a magnificent, exotic excursion into a world of hauntingly beautiful, timeless music.

Gismonti is clearly a romanticist, and most of his music is a soulful, delicate weave of Brazilian folk elements and modern jazz-not the slick, commercialized combination Stan Getz and João Gilberto gave us a few years back, but a more esoteric blend. Nana Vasconcelos, the percussionist who contributed so vitally to Gismonti's previous album, plays an equally important role on "Sol Do Meio Dia," which also features Norwegian saxophonist Jan Garbarek on one selection, Café, and appearances by fellow ECM regulars Ralph Towner and Collin Walcott. The addition of these musicians gives the new album a more varied soundyou've simply never heard anything quite like Sapain, which features Gismonti, Towner, and Walcott blowing into bottles (à la the old Southern jug bands) and blending that sound with whoops from Gismonti and Vasconcelos. Gismonti's two piano pieces, Coração and Baião Malandro, reflect opposite ends of the emotional spectrum, the first being a solemn, introspective solo, the second a voluminous, rhapsodic foot-stomper (with Vasconcelos subtly contributing on the berimbau), and both surpass Gismonti's brilliant keyboard work on the "Danca das Cabeças" album.

I don't know how well Polydor promoted Egberto Gismonti's first album, but I hope Warner Brothers (ECM's new distributor) goes all out on this one. Gismonti is a uniquely talented performer whose scope reaches far beyond the limits of jazz and whatever else comes under the heading of "popular music." — *Chris Albertson* 

EGBERTO GISMONTI: Sol Do Meio Dia. Egberto Gismonti (eight-string guitar, wood flute, kalimba, piano, voice, bottle); Jan Garbarek (soprano saxophone); Ralph Towner (twelve-string guitar); Nana Vasconcelos (berimbau, percussion, voice, bottle); Collin Walcott (tabla, bottle). Café (Procissão Do Espírito); Dança Solitária No. 2 (Voz Do Espírito); Coracão (Saudade); Raga (Festa Da Construção); Kalimba (Lua Cheia); Palácio de Pinturas (Construção da Aldeia); Baião Malandro (Fogo Na Mata/Mudança); Sapain (Sol Do Meio Dia). ECM ECM-1116 \$7.98.

#### Schubert's Last and Greatest Quartet by The Quartetto Italiano: Indispensable

**T** HE last and greatest of Schubert's string quartets—No. 15, in G Major, Op. 161 (D. 887)—is heard far less frequently than its two immediate predecessors, the beloved A Minor, Op. 29 (D. 804), and the D Minor (D. 810) whose slow movement is based on *Death and the Maiden*. The G Major has no sobriquet, no associations with Schubert's songs, and, although it is in a major key, the music is starkly and

unremittingly tragic, without the leavening of conspicuous lyricism that has made the other two quartets and the great Quintet in C Major so much better received. There is little effort to please here; instead we have an anguished outcry such as Schubert rarely permitted himself (there are near-parallels in the Piano Trio in E-flat, particularly in the slow movement, but that work does not reach the stage of tragic exaltation that informs this one).

I cannot recall a performance of the G Major Quartet, on records or live, in which the first-movement exposition repeat was taken, as it is in the new recording by the Quartetto Italiano-but that is only the least of the distinguishing features that set this version apart from all the others available now. One might think that this substantial repeat, especially played with the intensity the Italians bring to the music, would upset the balance of the work (the timing for the first movement in this performance is just short of twenty-three minutes), and/or that so much intensity piled upon intensity would leave the listener exhausted before the second movement can get started. But, in a curious sense, the repetition, in which the intensity is not relaxed a whit, somehow serves as its own resolution, and there is less of a sense of headlong plunge into the development. This austere, majestic, uncompromising music easily sustains these proportions; indeed, after hearing this performance, one might say it demands them.

In the remaining three movements one is taken by the expressiveness achieved within the prevailing framework of aristocratic self-control, by the exquisite delicacy in dynamic shading and the molding of phrases-a delicacy which is neither self-conscious nor in any way inhibiting to the strength and drive of the performance. The subtlety in the opening of the scherzo, to cite only one point, actually projects more demonic excitement than performances that go for speed and glitter: the tautness and tension are remarkable, and so is the beauty of the Italians' tone, in the work's most hectic passages as well as the ideally realized slow movement.

While comparisons are really beside the point in the face of this sort of music-making, I could not help finding even the Melos Quartet's admirable statement of this work (in Deutsche Grammophon set 2740 123) a little heavy-handed and unimaginative after hearing this one, and the Amadeus (DG 139 103), for all its elegance, doesn't begin to plumb the depths reached by the Italians. Philips has given the Quartetto Italiano quite an edge in terms of sonics, too, with splendid clarity, impeccable balance, and just the right degree of warmth to provide the most lifelike aural setting. In its thirty years plus of distinguished performances (with no change in personnel), the Quartetto Italiano has given us nothing finer than this; it is about as close to Schubert's heartbeat as any recording of his music has yet brought us—which makes it about as indispensable as any record could be. —*Richard Freed* 

SCHUBERT: String Quartet No. 15, in G Major, Op. 161 (D. 887). Quartetto Italiano. PHILIPS 9500.409 \$8.98, © 7300.617 \$8.98.

#### Alan Parsons and Eric Woolfson Offer Musical Trips for The Seventies

HAD a hard time deciding what category to file the Alan Parsons Project's new album "Pyramid" under. Moon Rock? Space Rock? Rock Trek? What we need, I think, is a new record bin labeled "Mood Music of the Seventies" for music written, played, and recorded by and for people who like to listen with the utmost concentration and in complete immersion—who like, in short, to take trips.

With the release of its latest Arista disc, the Alan Parsons Project has clearly earned a top spot in this new category. The song What Goes Up (Must Come Down) is getting heavy and much-deserved airplay these days, and it epitomizes what engineer Parsons and co-producer Eric Woolfson can do: combine soaring, lushly orchestrated melodies, intriguing lyrics, good solo instrumental work, choral voices, and a heavy rock beat into a thoroughly absorbing musical experience. No wonder. Parsons' previous credits include the Beatles' "Abbey Road," Pink Floyd's "Dark Side of the Moon," and other highly acclaimed LP's.

What Goes Up follows in the Moody Blues/late Beach Boys tradition, of course, but there are others just as good that won't let you down either. There's The Eagle Will Rise Again, for instance: the words are incomprehensible-and unimportant, for the song is almost hypnotically beautiful. Pyramania (that's not a misprint-the title refers to the pyramid fad, not to fires) tongue-in-cheekily suggests that "You can keep the edge of a razor as sharp as an/Eagle's eye, you can grow a hedge that is vertically straight/Over ten feet high, all you really need is a pyramid and just a little luck." And the now almost conventional "I'm-a-star-but-I'm-lonely'' number called Shadow of a Lonely Man can take its place with the best of its kind.

A tendency toward stylistic inconsistency may explain why Parsons' previous effort, "I, Robot," was more a technical masterwork than a musical

THE QUARTETTO ITALIANO: close to Schubert's heartbeat





**ALAN PARSONS AND ERIC WOOLFSON** 

accomplishment: it simply failed to communicate a unified and cohesive musical idea. Only one cut on "Pyramid"-One More River-makes distracting noises; it aims for straight rock and ends up breaking the album's mood. But that's just a small quibble. Everything else the Project does this time out they do well. What's more, they've performed some engineering magic that fully measures up to the demands of the mood. Listen especially to the harpsichordish opening of The Eagle Will Rise Again, or to the spaceage, Ted Weems whistling of the opening and closing themes of Can't Take It with You. There's also a tambourine accompaniment to the latter that is so realistic you can practically hear each "ping" as the metal jingles connect. The more I listen to "Pyramid," the more I like it. You can't say that too often these days about anything, so light up, lay back, let go, and listen.

-Edward Buxbaum

THE ALAN PARSONS PROJECT: Pyramid. The Alan Parsons Project (vocals and instrumentals). Voyager; What Goes Up ...; The Eagle Will Rise Again; Hyper-Gamma-Spaces; In the Lap of the Gods; One More River; Can't Take It with You; Pyramania; Shadow of a Lonely Man. ARISTA AB 4180 \$7.98.



Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH PETER REILLY • STEVE SIMELS • JOEL VANCE

LYNN ANDERSON: From the Inside. Lynn Anderson (vocals); orchestra, Buddy Skipper arr. Rising Above It All; Touch and Go; Bucket to the South; Sometimes When We Touch; From the Inside; Fairytale; and four others. COLUMBIA KC 35445 \$5.98, (\*) CA 35445 \$6.98, (\*) CT 35445 \$6.98.

Performance: Easy Recording: Excellent

Lynn Anderson long ago edged into the kind of thing Crystal Gayle and Dolly Parton are getting so much notice for now: popping the country-girl image. Anderson has a nice voice and a seemingly effortless way of using it, and there are a lot of violins and few fiddles backing her. The result, when the songs are reasonably good, as they are in this case, is a nice MOR album-except here the singer seems to be listening to the words, which MOR singers don't ordinarily do. Nice MOR albums usually have an all-pleasant/nothing-memorable quality, but in this case you may be able to latch onto When You Marry for Money ("... you earn every penny you get"), not because it's that good a song but because of the bizarre amount of orchestration they've given it. I'd like to hear the whole thing again with half the orchestra laid off. N.C.

THE BACKALLEY BANDITS. The Backalley Bandits (vocals and instrumentals); instrumental accompaniment. Stayin' Ain't Crossed

#### Explanation of symbols:

- $\mathbf{R}$  = reel-to-reel stereo tape
- (8) = eight-track stereo cartridge
- **(C)** = stereo cassette
- 🔲 = quadraphonic disc
- **R** = reel-to-reel quadraphonic tape
- $[\mathbf{8}]$  = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol  $\mathfrak{M}$ 

The first listing is the one reviewed; other formats, if available, follow it.

My Mind; Come On Over; Takin' a Chance; Love Stuff; Georgia Women; and four others. LONDON PS 712 \$6.98, (1) 8-712 \$7.95, (2) 5-712 \$7.95

Performance: Fair Recording: Very good

Alas, alas. Since Dan Penn and Chips Moman produced this album, and since Penn and . Spooner Oldham contributed two songs, I expected some of the American Studios magic, the sort that worked so well for Elvis Presley, B. J. Thomas, and the Box Tops. It's not here this time, though. The Penn/Oldham tunes, Come On Over and Takin' a Chance, are throwaway items well below the level you'd expect from the team who wrote Cry Like a Baby and the mini-concerto I Met Her in Church. Even so, the tunes might work if Come On Over were sung and played harder and if Takin' a Chance had some whimsicality to it. But the Backalley Bandits (four men and two ladies) don't have the bite or the humor. The other selections, mostly written by the group, are dangerously close to hack writing and are sung with all the sincerity of encyclopedia salesmen. Well, even mighty talents like Messrs. Moman, Penn, and Oldham can't J.V.be red-hot all the time.

#### RECORDING OF SPECIAL MERIT

MICHAEL BLOOMFIELD: Count Talent and the Originals. Michael Bloomfield (guitars, vocal, piano); vocal and instrumental accompaniment. Love Walk; I Need Your Loving; You Was Wrong; Bad Man; Peach Tree Man; Saturday Night; and four others. CLOUDS 8805 \$7.98, @ CLD 8805 \$7.95, @ CLD 8805 \$7.95.

#### Performance: Jamboree Recording: Good

Guitarist Michael Bloomfield has here assembled a group of musicians and singers for a busman's holiday in which nobody takes anything too seriously but does his job just right and has a good time into the bargain. On Bloomfield's last album, "Analine" (Takoma B-1059), he played personal favorites and his own tributes to master guitarists of other eras, apparently for sheer pleasure. On the present disc he has extended that concept to a group. The name "Count Talent and the Originals" pokes fun not only at group names in general but also at the very idea of broad commercial success.

The jolly crew on board for this outing includes vocalist/bassist Roger Troy, whose intimate and casual style is always a delight; he's featured on You Was Wrong (written by Bloomfield) and I Need Your Loving, a recreation of the 1960's rhythm-and-blues hit by Don Gardner and Dee Dee Ford. Bloomfield takes the vocal on his own Peach Tree Man, sounding very much like Randy Newman. Nick Gravanites essays Saturday Night, and Anna Rizzo leads the wassail on Sammy Knows How to Party. "Count Talent" is a delightful, candid, and relaxing album-one you ought to have in your collection to play for special friends when they want to hear the IV real stuff.

THE BOONES: First Class. Cherry, Lindy, Debby, and Laury Boone (vocals); orchestra. I'm a Believer; Let Me Be Lonely; Father's Arms; Perfect Love; Dance; and six others. LAMB & LION LL-1038 \$6.98.

Performance: **Debby's show** Recording: **Good** 

Debby Boone takes the lead vocal on six of the ten songs here, and while none of the material can hold a candle, so to speak, to You Light Up My Life, she comes across as a consistently appealing performer with a nice emotional tug in her lyric readings. This is particularly obvious in her run-throughs of such pale things as My Love Will Never Change and Caught in This World, both by Chris Christian and both with the lyric and melodic consistency of peanut butter. That she is able to bring a hint of life and passion to them is what makes her so interesting as a singer. Her sisters Laury, Cherry, and Lindy take turns on the other tracks, and the only one who comes a real cropper is Lindy in I Love You More Than My Rock and Roll, in which she sounds like she's bellowing her
message from a descending elevator in a coal mine. Cherry and Laury stick to sweetness and light, which becomes them, and which, in the small doses here, isn't that cloying. P.R.

DAVID BROMBERG BAND: Bandit in a Bathing Suit. David Bromberg (vocals, guitar, mandolin, fiddle); Dick Fegy (guitar, banjo, mandolin, fiddle); John Firmin (reeds); Curt Linberg (trombone); other musicians. If You Don't Want Me Baby; Queen Ellen; Sweet Sweet Sadness; Peanut Man; and five others. FANTASY F-95555 \$7.98, (1) 8160-95555(H) \$7.95, © 5160-95555(H) \$7.95.

#### Performance: Disappointing Recording: Very good

Man does not live by funk alone, David Bromberg, and slathering it over with eclecticism can get old too. I think the biggest problem with "Bandit in a Bathing Suit" is that the songs mostly don't give Bromberg's band much to hang anything on-several are notoriously tuneless. The first side is called "mostly electric," the second "mostly acoustic," and I don't care much for dividing up the songs that way, either. Sweet Sweet Sadness on the first side, a little electric, is the high point. Side two has a lot of funky lyrics, some picking that doesn't quite jump out at you in the usual Bromberg way, and more weak tunes. Bromberg seems to have all kinds of bands incorporated in this one. He does a nice near-jazz instrumental called Peanut Man that's all too brief, and then it's fiddles and banjos in the next cut. Maybe he can keep it straight, what his band's sound is, but me, after listening to this, I'm wallowing. Wallowing's not much fun without good tunes. N.C.

LISA BURNS. Lisa Burns (vocals); instrumental and vocal accompaniment. Soul Deep; When You Walk in the Room; Love Gone Bad; Victim of Romance; In the Streets; Slow Burn; and four others. MCA-2361 \$6.98.

#### Performance: Déjà vu Recording: Evocative

Talk about mixed emotions. When I listen to Lisa Burns I don't know whether to sneeze. laugh, or shed a tear for my lost youth. She obviously tries to sound like Ronnie Spector of the Ronettes, and the production of this album is a facsimile of producer Phil Spector's "wall of sound" bravura, the kind of corny whim-wham of the early Sixties that rock historians still speak of with reverence. Not that Spector's productions didn't work. Who could resist the Righteous Brothers' You've Lost That Lovin' Feeling or the Ronettes' Be My Baby? They were examples of superb hambone sure to raise a lump in the throat. But why should anyone at this late date try not only to re-create their period flavor but to sing like she believes in it?

The tone for the album is set in the opening selection, Soul Deep, written by Wayne Carson Thompson (who also wrote The Letter) and recorded by the Box Tops in 1969 with Alex Chilton's distinctive lead vocal. Burns follows Chilton's pattern, and the arrangement includes a break where a guitar plays a descending run-an item taken from the arrangement for Spector's You've Lost That Lovin' Feeling. Jackie DeShannon's When You Walk in the Room is quite a grabber, and Victim of Romance was written by Moon Martin in the style of Ellie Greenwich and Jeff Barry writing for the Dixie Cups circa 1963.

But Love Gone Bad-also by Martin-is a departure for Ms. Burns, since in this song she tries to sound like Linda Ronstadt. Hmmm. . . . Well, whatever she's trying to do, I enjoyed her album.

HARRY CHAPIN: Living Room Suite. Harry Chapin (vocals, guitar); orchestra. Dancin

Boy; Poor Damned Fool; Jenny; Flowers Are Red; and five others. ELEKTRA 6E-142 \$6.98.

Performance: Pompous Recording: Good

If you think that Bob Dylan's film Renaldo and Clara was a narcissistic bore, just wait (Continued on page 112)



J.V.

Pat Hodges, Jessica Smith, Denita James

# Hodges, James & Smith

'LL mince no words in declaring that Hodges, James & Smith is one of the best female singing groups I've heard in any year, measured by any criterion. Though there are only three of them, they emit a wall of sound that would be admirable for a choir, and the range of their voices is so rich and broad in texture as to cover the full spectrum of musical passion.

There might be an inclination to compare them with the old Supremes, considered by some the greatest "girl group" of all time, but HJ&S are cut from their own very distinctive cloth. While ample room is allotted for solos, no single voice or personality dominates their sets. Instead, they function as a cohesive unit, moving in and out of the music with exceptional deftness, punctuating the longer statements with bursts of beautifully harmonized ensemble singing. They seem to hold an assortment of rhythms in the palms of their hands, using them as they wish to achieve the greatest impact.

Happily, all the promise HJ&S showed on their first set for London, "What's on Your Mind," has been fulfilled on their thoroughly outstanding new album, "What Have You Done for Love?" The pace varies from that of the sweet ballad That's the Way, through kickers such as the title song, to the two most captivating tracks, a dazzling rendition of You Can't Hide Love (previously done by Earth, Wind & Fire) and Hide-a-Way (which Bill Withers wrote and produced just for them). Furthermore, their zest and forcefulness are matched by background instrumentals and arrangements several cuts above the average. All the elements merge here into a thoroughly dazzling, thoroughly delightful whole. May they sing on and on and on.

-Phyl Garland

HODGES, JAMES & SMITH: What Have You Done for Love? Hodges, James & Smith (vocals); instrumental accompaniment. What Have You Done for Love?; The San Francisco Rag; You Can't Hide Love; Falling in Love; Hide-a-Way; You Know Who You Are; That's the Way; Here Is Where Your Love Belongs; Seems So Long; Darling, I Promise. LONDON PS 713 \$6.98, (1) 8 713 \$7.95, (C) 5 713 \$7.95.



# **Powerhouse Dylan**

r's a new Bob Dylan album and you can't help thinking about the, uh, you know, the d-i-v-o-r-c-e. So, hell, let's talk about it. A high-price Boston analyst at a medium-price cocktail party once told me two things that seem to apply here: there is no way to go through a divorce without getting depressed, whether one consciously recognizes it or not, and artists often use their depression more creatively than they use their happier moments. If the man is right, then the ingredients might be right to make this new Dylan album a powerhouse. And it is. The further implication in this, for those who like their logic tied up in a square knot, is that Dylan not only figured to be down a bit when he conceived and executed "Street-Legal," but is indeed an artist. And he is.

Those in the faction that's always yipping "What do you see in him?" at the rest of us do so because they have been looking for craftsmanship, not art. Dylan does not craft music. I can play the harmonica better than he can, I have at least fifteen hippie-type friends who can play the guitar better than he can, and I know several people who can recycle folk- and rock-tune turns as well as he usually does. And of course any number of people can sing as well as he does--if by "sing" you mean attend to intonation and phrasing and other technicalities. Dylan's vocals, though, argue that it's better to be right than to be technically wonderful. And his wordsthrough the years, the most important thing about him-come from a unique observation point, and they come out through an almost romantically cold-blooded understanding of the difference between words and the things they attempt to describe, between imagery and image.

Those who used to yip for him to get back to protest songs, topical songs, to "regain his social conscience," were of course looking for *politics* rather than art. Well. Sticking to craftsmanship and politics would work for some people (although I believe it actually was involved in the death of a few of our troubadours), but Dylan has had, as he has been trying to tell people, *work* to do. In the *very* old days, some attention was paid to those who influenced him—various bluesmen, various poets, and Woody, of course, but damned few outright politicians. Like others who started out as journalists but were really literati all along. Dylan probably sensed the trap of topicality, the unreliability of headlines as a basis for literature.

And so he moved on, not exactly in a straight, sure line. In "Street-Legal" he hasn't arrived yet—hasn't, in fact, got the line entirely free of wobbles—but he's mixed content and style into a fine stew, making observations that are at once general and specifically yours, mine, and the other guy's, all, on the surface, different. Doing it with the old Dylan flair, too. "Betrayed by a kiss, on a cool night of bliss/In the valley of the missing link".

He knows what he's doing even when he doesn't know...

lovers' quarrel in Olduvai Gorge, if that's your thing. Other lines just chill your bones: "Lovers obey you/But they cannot sway you/ They're not even sure you exist." You've known the feeling, I'm sure. Regarding the blues influence, *New Pony* harks back to that structurally, and if you want to, you can also hark *it* back to the divorce, obliquely: "Sometimes I wonder what's goin' on with Ms. X [Ex?]/She got such a sweet disposition, I never know what the poor girl's gonna do to me next."

Throughout the album, Dylan is trying on a new sound, as he tends to do from time to time, this one a sort of reedy rock instrumentation with much ado from a vaguely r-&-b chorus. The chorus is probably used so much (a little *too* much for me and everyone else I've played the album for) by design, to lighten things up, to put the idea of a little choreography in your mind and say, often enough so you won't forget, that it's a song, it's still a song.

For there are two things missing from "Street-Legal," two characteristic Bob Dylan things. One is the squeaky harmonica, which would be at odds with the smoother sound that prevails here (the old one-take sloppiness is missing, too, this being one of the most carefully produced Dylan albums yet, which stifles spontaneity some but not entirely), and the other is the old off-beat humor Dylan used to chuck in there at odd moments. On the contrary, this one has more moments like, "You can't find no salvation/And no expectations/ Any time, any place, anywhere. . ." Or: "Horseplay and disease/Are killing me by degrees/While the law looks the other way."

As for the world situation, he looks at an era (just once) rather than at the latest thing in Newsweek and asks-in a song that suggests he's read Carlos Casteneda—"Señor, can you tell me where we're headin'?/Lincoln County Road or Armageddon?" Again, if you're a specifics freak and don't mind how trivial your specifics get, you can read an esoteric richness into that: the Lincoln County War was a contributing factor, you might say, in the life of Billy the Kid, the subject of the movie Pat Garrett and Billy the Kid, in which Dylan appeared and for which he wrote the music. I tell you, if A. J. Weberman, the guy who used to analyze Dylan's garbage, is still cross-indexing Dylan's lyrics, he's going to have a field day with this album.

WHAT else you have with it depends on what you want, to some extent. Unless what you want is humor and a squeaky harmonica. Listen lightly and you hear a new sound—not radical, but different and rather nice. Listen more intently and you find ideas about that old favorite, the human condition, and a richness of expression borne on one of the bona fide styles of our time . . . though you'll still be bothered by the excess of chorus. But if he had given it to us raw, some of it might have bitten back. He knows what he's doing even when he *doesn't* know what he's doing. That's one definition of an artist.

—Noel Coppage

BOB DYLAN: Street-Legal. Bob Dylan (vocals, guitar); Ian Wallace (drums); Jerry Scheff (bass); Billy Cross (guitar); Alan Pasqua (keyboards); Steve Douglas (saxophone); other musicians. Changing of the Guards; New Pony; No Time to Think; Baby Stop Cryin<sup>\*</sup>; Is Your Love in Vain?; Señor (Tales of Yankee Power); True Love Tends to Forget; We Better Talk This Over; Where Are You Tonight (Journey Through Dark Heat). COLUMBIA JC 35453 \$7.98.

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Marshall Chapman: real triumph over real inhibitions

until the sententious sandbag of Harry Chapin's newest album drops on you. I tell you, these beached remnants of the Sixties are getting windier than a baked-beans and sauerkraut agape conference. Perhaps the true flavor of Chapin is best illustrated by a few samples of his lyrics, such as "And I know you're frightened/By my laughter/But you're not afraid/To hold my pain" from It Seems You Only Love Me When It Rains. Or "If you try to look/But you don't touch/Then you won't touch/But you'll never feel/And if you don't feel/You'll never cry/And if. ...'' from If You Want to Feel. Chapin's music is as lethargic as his verse, and by the end of this album I felt like one of those floating bodies in the ads for Coma. P.R.

RECORDING OF SPECIAL MERIT

MARSHALL CHAPMAN: Jaded Virgin. Marshall Chapman (vocals, guitar); instrumental accompaniment. Turn the Page; The Island Song; You're the One for Me; I Forgot to Put the Music On; A Thank-You Note; and four others. EPIC JE 35341 \$7.98, <sup>®</sup> JEA 35341 \$7.98, <sup>©</sup> JET 35341 \$7.98.

#### Performance: **Coming through** Recording: **Good**

Marshall Chapman is to Waylon Jennings as Patti Smith is to Mick Jagger; that is, she does what some had thought was a man's thing on the stages of country rock. It's true that Marshall. and for that matter her whole band,

WHO ARE YOU

would be more believable if she didn't try so hard to sound tough, but there's more than that streak of personality coming throughand in this album she has some fine tunes to wrap it all in, starting with Bob Seger's Turn the Page. Anyway, a certain amount of strutting comes with the job, as males have defined it, and so does a certain amount of real triumph over real inhibitions, make no mistake about that. Chapman is gutsy in addition to being able to act that way, and when she tells you women get horny too, by George you believe it. Here her band, as produced by Al Kooper, gives her mostly a hard rock sound, which is a good enough start, but I think ultimately she has to have a band sound that's just hers, the way Waylon does, the way Willie does, the way Mick does. This is edging up on it, though, and shows you plainly enough that Marshall Chapman has something and will be around for a while. NC

#### RECORDING OF SPECIAL MERIT

CHESTER AND LESTER: Guitar Monsters. Chet Atkins and Les Paul (guitars, vocals); other musicians. Limehouse Blues; I Want to Be Happy; Over the Rainbow; Meditation; Lazy River; I'm Your Greatest Fan; and five others. RCA APL1-2786 \$7.98, <sup>(I)</sup> APS1-2786 \$7.98, <sup>(I)</sup> APK1-2786 \$7.98.

Performance: Excellent Recording: Excellent

Like the first album pairing these two master guitarists, this second outing is a thumping de-(Continued on page 114)

New Song Had Enough 905 Sister Disco Music Must Change



Trick Of The Light Guitar And Pen Love Is Coming Down Who Are You

MCA-3050 Produced by Glyn Johns and Jon Astley



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RS2010



# The Tom Petty Synthesis

Now here's a truly magnificent anomaly: a late-Seventies rock band peddling a mid-Sixties synthesis that sounds like neither a history lesson nor a pastiche. When you think of all the bands that have attempted this in the past and failed despite lots of native talent, and when you consider with a shudder the hordes of similar failures the rise of Power Pop as a critically sanctioned concept will inflict upon us, you can only shake your head and wonder: how do Tom Petty and the Heartbreakers get away with this kind of seemingly old-fashioned music?

The answer, perhaps, is that it's simply a matter of personal taste. The archetypes Pet-

ty draws on—the Stones and Roger McGuinn—are, to my ears at least, a lot more vital than the pop influences, the Beatles in particular, that almost everybody else from the Raspberries on down have reworked. Which is to say that Petty's stuff seems a lot less candy-coated, and you can be sure that he will never go the Eric Carmen route and start grinding out overblown, Elton Johnish MOR pabulum. He's a rocker.

But I suspect there's more to it than that. Even when Petty's being as superficial as any other revivalist, it's a lived-in superficiality; he seems truly to believe in all this stuff with the same fervor and intensity you find in all the great ones, from Chuck Berry to Bruce Springsteen. Even the relatively uninspired things on his group's new album, "You're Gonna Get It," seem less like creative failures than good-natured filler, like the B-sides of old British Invasion singles or the deliberate joke cuts on Byrds albums. And for all the formal perfection of what Petty and the Heartbreakers do (they've obviously done their homework), none of these tunes strike you as being too clever for their own good.

F you don't believe that any of this is possible (and just between you, me, and the wall, until Petty's last album neither did I), listen here to Magnolia, or I Need to Know, or When the Time Comes. Then consider how exciting it's going to be when Petty finally transcends his influences-which, if his rate of growth continues apace, should be only two or three albums from now. And then thank your lucky stars that, with the Eighties less than a year and a half away, we have one more classic rock-and-roll band trying to give radio back to the kids and to help all of us make the transition to the More Interesting Times it now seems reasonable to expect are —Steve Simels ahead.

TOM PETTY AND THE HEARTBREAK-ERS: You're Gonna Get It. Tom Petty and the Heartbreakers (vocals and instrumentals). When the Time Comes; You're Gonna Get It; Hurt; Magnolia; Too Much Ain't Enough; I Need to Know; Listen to Her Heart; No Second Thoughts; Restless; Baby's a Rock 'n' Roller. SHELTER DA-52029 \$7.98.

light. Again the program is composed of sturdy melodies that offer dozens of opportunities for improvisation, and Atkins and Paul make the most of them. Paul's playing is a little less frisky and boyish than it was on "Chester and Lester"; he seems to be taking things a bit more seriously here, while Atkins, a trifle cautious on the first album, has opened up and swings more. There is some clowning between them on *I'm Your Greatest Fan* in which Atkins jokingly says, "I don't wanna record with you any more," and Paul replies, "Just one more album." Make it a *dozen* more, boys, and you'll be doing the world a favor. J.V.

COMMANDER CODY: Flying Dreams. Commander Cody (vocals); vocal and instrumental accompaniment. Thank You, Lone Ranger; Cry Baby Cry; He's in Love (He's in Trouble); Life Is a Carnival; Talent Night at the Nashville Inn; Flying Dreams; and five others. ARISTA AB 4183 \$7.98.

#### Performance: Very good Recording: Good

Commander Cody, a.k.a. George Frayne, is a good-time fellow with a fine sense of the ironic and the ridiculous. He uses the trappings of country music for songs about characters and situations seen through a city slicker's slightly bloodshot eye. Among the standouts in this latest collection are *Thank You*, Lone Ranger, in which the masked rider of the plains saves a rancher's daughter and gets her with child; He's in Love (He's in Trouble), about a shore-leave sailor falling for a transsexual; and *Talent Night at the Nashville Inn*, as sweeping and bitter a commentary on amateur nights in Music City, U.S.A., as you are likely to hear this or any other year. Frayne is a very fine satirist, which may be one of the reasons why he hasn't become a Recording Star but has maintained a faithful audience. You might want to join the faithful after listening to "Flying Dreams." I've already sent in my application form. J.V.

**RITA COOLIDGE:** Love Me Again. Rita Coolidge (vocals); instrumental accompaniment. You; Slow Dancer; Sweet Inspiration; Love Me Again; Bye Bye Love; The Jealous Kind; and four others. A&M SP-4699 \$7.98.

Performance: Low-energy Recording: Clean

Sorry, but listening to this reminds me of what Dorothy Parker said about Cal Coolidge when someone told her he had just died: "How can they tell?" Rita has the voice, and here, thanks largely to Booker T. Jones' hand in the production, she has the backing, but she still sounds like the back-up singer she used to be, reticent (or something) about stepping forward and taking charge of a song. When you fear the singer is about to nod off during Bye Bye Love, you tend to brace yourself with some very strong coffee (or something) for the slow ones-and you tend to wish she would too. But Hello Love, Goodbye finds her a little more actively passive, and it is a lovely exception to the above grousing. She does have the voice, pretty enough on the high notes and with a truly rare beauty on the low ones. But the star of the show can't just have it; she's also got to do it. N.C.

#### RECORDING OF SPECIAL MERIT

DERRINGER: If I Weren't So Romantic, I'd Shoot You. Rick Derringer (vocals, guitar); Kenny Aaronson (bass, vocals); Myron Grombacher (drums, vocals). It Ain't Funny; Midnight Road; If I Weren't So Romantic, I'd Shoot You; EZ Action; Sleepless; and six others. BLUE SKY JZ 35075 \$7.98, @ JZA 35075 \$7.98, © JZT 35075 \$7.98.

Performance: Excellent Recording: Good

By all odds this is Rick Derringer's best album. It is also one of the best straight-ahead rock albums of the decade. The instrumental performances are lean, tight, and muscular, the vocals are flexible and confident, and the material is 'way above average for rock songs. All the selections are good, no-nonsense rock, but the three standouts are the title tune (music by Derringer, lyrics by Alice Cooper and Bernie Taupin), Warren Zevon's Lawyers, Guns and Money, and Derringer's EZ Action. Derringer, bassist/vocalist Kenny Aaronsen, and drummer/vocalist Myron Grumbacher have done right by themselves as artists while performing a public service: they have put life back into rock. J.V.

FOREIGNER: Double Vision. Foreigner (vocals and instrumentals.) Hot-Blooded; Back Where You Belong; Blue Morning, Blue Day; Double Vision; I Have Waited So Long; and five others. ATLANTIC SD 19999 \$7.98, <sup>®</sup> TP 19999 \$7.98, <sup>®</sup> CS 19999 \$7.98.

#### Performance: Enjoyable Recording: Excellent

Foreigner is currently the hottest act in the pop-record business. This, the group's second (Continued on page 116) It's midnight. You're losing, and your roll is critical. Click. The music stops and so does your concentration.

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BR Consumer Products Group, Re. 303, Blauveit, NY 1993 • Distributes in Canada: by BSR(Canada) Ltd, Rexdaie: OnL • @ Ouania is a registered taademark of BRIUSA) Ltd. CIRCLE ND. 19 ON READER SERVICE CARD album, had advance orders from record distributors of 1.3 million units, which means that the LP "shipped platinum" to record stores. Though platinum albums are becoming more the norm than the rarity in today's expanded pop market, it is still pretty special for a group to hit platinum its second time out. Atlantic Records, a hot label for twenty-five years, reports that advance orders for "Double Vision" are the highest in its history.

Given all that, you'd suppose that the music of Foreigner is extremely novel or that the members of the band have the same kind of popular appeal the Beatles used to have. But neither is true. Like the Swedish group Abba, Foreigner makes montages of riffs, figures, chord changes, and sentiments derived from every successful group of the past twenty years—only they don't do it as clinically as Abba does. The music here is enjoyable and it comes across as candid, but it doesn't have a great deal of personality. Overall, Foreigner sounds like the J. Geils Band before it went stale.

The opening track here, Hot Blooded, first released as a single, begins with a familiar chug-chug guitar figure like the one used in 1969 on Gimme Gimme Good Lovin', a bubblegum hit with rhythm-and-blues overtones, and both songs are about a fellow in search of fleshy fluff. Compare Blue Morning, Blue Day with Six O'Clock, which John Sebastian wrote for the Lovin' Spoonful, and you'll find them cousins. You're All I Am is very much in the manner of Paul McCartney (in the days when he was worth hearing), and Tramontane, an instrumental that is more or less a gilded riff, reminds me of the Band's Chest Fever. The material was written during a long and hectic road tour, and some of the songs seem to have been dashed off to meet the deadline of a recording date. (The sound, by the way, is excellent; engineer Keith Olsen, who co-produced, is also responsible for the fine, clean sound on Fleetwood Mac's "Rumours" album.) None of the material approaches Cold as Ice, the hit single from Foreigner's first album.

So what accounts for the 1.3 million preorders? Well, Foreigner is easy to listen to and enjoy. A heavy schedule of personal appearances kept up the momentum of the first hit album and preconditioned the audience for "Double Vision," which was released at the beginning of the summer when everyone was ready for summer madness and looking for music to feed or augment it. Finally, the rock audience is no longer looking for heroes to worship but for entertainers. Ideology and fervor are swell things, but they don't leave you much time for dancing. J.V.

DEAN FRIEDMAN: "Well, Well," Said the Rocking Chair. Dean Friedman (vocals, guitar); instrumental and vocal accompaniment. Rocking Chair (It's Gonna Be All Right); Shopping Bag Ladies; Don't You Ever Dare; The Deli Song (Corned Beef on Wry); S & M; and four others. LIFESONG JZ 35361 \$7.98. (B) JZA 35361 \$7.98, (D) JZT 35361 \$7.98.

Performance: Challenging Recording: Good

Dean Friedman hit the charts last year with the hilarious Ariel, a song about a typical teenage tryst which was written with wit and bite. I missed his first album, alas, and on the second, again alas, there isn't anything that (Continued on page 118)



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touches Ariel. But it's still an important album because Friedman has talent and-to his credit-he takes chances. Lucky Stars is a conversation between lovers wherein the boy admits he saw a former girl friend for lunch and is embarrassed about it. Rocking Chair (It's All Right) is a little psychodrama in which a fellow imagines he's receiving advice on life from objects in his room-the rocking chair, the radio, the coffee cup, etc. The Deli Song (Corned Beef on Wry) is the most artistically ambitious selection: three characters, a boy and a girl falling in love and a hard-bitten waitress, sing and act out the situation (Michele Lamb is the girl and Lorraine Rebidas is the waitress).

Friedman's attempts to expand the popular song into a musical drama—a phonographic theater somewhat on the order of the great days of radio drama—is a logical progression from his earlier songs, which are nearly all character studies. He does not describe situations so much as the reactions of his characters to these situations; he doesn't write lyrics so much as dialogue. He is a musical dramatist, a pop-song playwright.

Friedman hasn't yet fully worked out his theories. This album finds him still struggling to make his ideas musically coherent, forceful, and palatable, but it is a thrill to hear him in the process. Excelsior, kid! And break a leg! J.V.

**PETER GABRIEL.** Peter Gabriel (vocals); instrumental accompaniment. On the Air; D.I.Y.; Mother of Violence; White Shadow; Indigo; Exposure; and five others. CHARISMA. CDS 4013 \$6.98, <sup>®</sup> TP 19181 \$7.98, <sup>©</sup> CS 19181 \$7.98.

Performance: Dank Recording: Average

Peter Gabriel, former lead singer of Genesis, is a sort of gothic punk and deserves more blame than most for the existence of such trash as Kiss. On the other hand, the latterday men in greasepaint and platform shoes and others whose gimmick is looking ridiculous did miss a point about Gabriel: the music that surrounds him is not a total loss, and the musicians behind him play with some skill (though, in this case, they seem to have few ideas beyond some kind of theory about the glory of repetition). Still, he's a mediocre, run-of-the-mill rock singer with another of those high-pitched English-boy voices hiding as much as possible behind the instrumentals. A number of these songs-while they'd be listenable if we could get someone to sing them-probably would prove increasingly sappy the more words you could make out. Gabriel might still be good theater; I haven't seen him lately so I don't know. But I do know that I'd rather look at this album than N.C. listen to it.

LARRY GATLIN: Oh! Brother. Larry Gatlin (vocals, guitar); vocal and instrumental accompaniment. Do It Again Tonight; I've Done Enough Dyin' Today; L.A. You're a Killer; I've Got You; Standin' by Me; Night Time Magic; and four others. MONUMENT MG 7626 \$7.98, @ T 7626 \$7.95, @ C 7626 \$7.95.

Performance: **Good, but...** Recording: **Very good** 

The title of this album is intended to give some recognition to Larry Gatlin's brothers, Steve and Rudy, who are prominent in that harmony singing that helped put his sound up there in the country firmament. But what the content of the album suggests is that here is another talented fellow whose writing suffers when fame puts increased demands on his time. And he can't write as well as he can sing in the first place. Night Time Magic has been a hit of sorts and is pleasant enough, but even it sounds like a rewrite of two or three of his earlier songs. A good percentage of "Oh! Brother" was recorded in London and another chunk of it in L.A., and it has a sort of rock-to-schmaltz sound, although a number of the songs do have familiar Gatlin turns in the melodies and changes. I've Got You, while not particularly satisfying, is patently by Gatlin for Gatlin's voice. The rest is a little better than filler (I like side two better than side one), except for Cold Day in Hell, which is simply a dud. I don't know, come to think



LARRY GATLIN A singer and a half

of it, that I've ever heard Gatlin sing a song written by someone else, but this album suggests that he should give that idea some thought—he is a singer and a half. Or he could try getting people and commitments and the demands of notoriety off his back, as a writer has to do in order to really work at the craft. At any rate, these weak songs in the company of this fine voice are out of their class. N.C.

ANDY GIBB: Shadow Dancing. Andy Gibb (vocals); vocal and instrumental accompaniment. Shadow Dancing; Why; (Our Love) Don': Throw It All Away; Everlasting Love; I Go for You; Good Feeling; and four others. RSO RS-1-3034 \$6.98, <sup>®</sup> 8T1-3034 \$7.98, <sup>©</sup> CT1-3034 \$7.98.

#### Performance: Engaging Recording: Good

This album was my first exposure to Andy Gibb, youngest of the performing Bee Gees clan, but something far less mysterious than intuition tells me that we'll all be hearing a lot more from him. As with his astonishingly popular brothers, everything about him seems to beckon to a broad audience. Though the lyrics of his songs don't seem to say much, the music, most of which he wrote himself, rides the ear well, being a pleasant pastiche of *(Continued on page 120)* 



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BUTLER AND HOUSTON: cool restraint and spirited vitality

popular motifs punctuated with tastefully applied, lilting, r-&-b-flavored rhythms. He has an engaging vocal style and a rather high voice with a light quality that permits him to bounce about on the notes with apparent ease, most notably here on Everlasting Love. There are a few moments, as in I Go for You, when he sounds faintly like a Marvin Gaye minus the heavy sensuality, and occasionally the Bee Gees' influence is unmistakable, but overall he is not derivative or imitative of any particular artist. For the most part, the fare here is late-adolescent romantic-without being gratingly squeaky-clean in the Osmond vein. The vocal backgrounds (some contributed by older brother Barry, who also helped produce the disc) are blended in skillfully to enhance rhythmic flow, but the instrumentals are strictly functional and attain no distinction. This is certainly not "blue-eyed soul," to use that pejorative phrase; Andy Gibb's music is more deeply rooted in middle-of-theroad pop.

Gibb is a bit bland for my taste, but his ability to be pleasant without easing into anything that might be remotely construed as offensive, or even arousing, might be his ace in a period when no one seems to want to make too many musical waves. In this respect, he might well be the perfect popular troubadour for the relatively quiet late Seventies. *P.G.* 

THELMA HOUSTON AND JERRY BUT-LER: Two to One. Thelma Houston, Jerry Butler (vocals); instrumental accompaniment. If It Would Never End; Find a Way; We Owe It to Ourselves; Never Gonna Get Enough; and four others. MOTOWN M7-903R1 \$6.98.

#### Performance: **Together again** Recording: **Satisfactory**

"Two to One" has all the ingredients that made this pair's first duet album so appealing: the smooth blending of vocal styles, with Thelma injecting a spirited vitality to counterbalance Jerry's cool restraint; the respect for each other's space that permits both artists to stretch out without appearing to hog the show; and the skillful handling of material. The only shortcoming here is in the songs, which too frequently fail to rise above the merely pleasant despite the stylish manner in which they are executed. The second side is better than the first: Butler stirs up some genuine steam on *Never Gonna Get Enough*, and Houston gives full vent to her fine voice on *Don't Pity Me*. But in comparison with their earlier album, this one is a bit tepid. *P.G.* 

MILLIE JACKSON: Get It Out'cha System. Millie Jackson (vocals); instrumental accompaniment. Go Out and Get Some (Get It Out'cha System); Keep the Home Fire Burnin'; Logs and Thangs; Put Something Down on It; Here You Come Again; and four others. SPRING SP-1-6719 \$7.98.

Performance: Clean Recording: Good

Well, the first lady of raunch is with us again, but from the contents of this album it appears that someone must have told her to cool it on the raw references that have become her stock in trade; the patter she offers us here is a pretty pallid blue. The comments interwoven with the songs on "Get It Out'cha System" would not even merit a "Parental Guidance" rating, much less a tantalizing "X." The beat is good, and Millie blasts into each track with the earthy gusto that qualifies her as a first-rate r-&-b belter, even without the raunch. Maybe a cleaned-up Millie is more suitable for airplay, but I, for one, prefer her when she lets it all hang out. P.G.

#### RECORDING OF SPECIAL MERIT

KISS: Double Platinum. Kiss (vocals and instrumentals). Strutter '78; Do You Love Me; Hard Luck Woman; Calling Dr. Love; Let Me Go, Rock 'n Roll; Deuce; Detroit Rock City; She; Beth; Makin' Love; and ten others. CA-SABLANCA NBLP-7100-2 two discs \$11.98, (®) NPL8-7100 \$13.98, (©) NPL5-7100 \$13.98.

#### Performance: Better than need be Recording: Good

Facts first: Kiss went to England and remixed all the previously released tracks included on "Double Platinum." Everything has a lot more punch in these new versions, so even if you own the songs already, you'll find that this set is a worthwhile investment.

(Continued on page 124)

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ODD RUNDGREN did an interesting thing this past May. He went into New York's Bottom Line for a week-long engagement and, in cooperation with the Visiondisc Corporation, came up with an audio/video souvenir of his final two performances, now available as an hour-long cassette titled "Live/Special." (This makes him, by the way, the first major rock artist to get in on the forthcoming home-video revolution, as noted in these pages in our August "Bulletin"). If I were critic Jon Landau, I'd probably greet the finished product this way: "I have seen the future of live recorded rock-and-roll and it is the video cassette." But I'm not, so I won't. What I will say, however, is that I have seen the future and it's an awful lot of fun.

The Rundgren show, as thus immortalized. is a very satisfying mixture of slickness and spontaneity, the kind of thing that both video aficionados and rock purists should get off on equally. The sound was mixed by Rundgren himself, and it is wonderful (the cassette, unfortunately, due to the limitations of current hardware, is in mono, but it is state-of-the-art as far as that goes, and the Visiondisc people have Rundgren's stereo mix in abeyance for the time when the hardware catches up). To his credit, Todd has resisted the temptation to do a Peter Frampton and doctor the tapes into relative perfection. So we do get an occasional out-of-tune guitar or missed cue, but we also get that sense of risk taking and audience communication that is the major pleasure of a live performance. And the camera work is as good as if not better than anything you'll see on the networks, which is to say unobtrusive, exactly the way rock-and-roll should be presented but rarely is.

What is most interesting to me is how the small screen manages to humanize Rundgren at the same time it makes him appear far more compelling than I would have believed possible. To be frank, I have never cared for Todd as a live act because, like Bob Marley, George Harrison, or (to a lesser extent) Patti Smith, he's a Believer in some vague, mystical, uninvolving Something, and this messianic streak



has resulted in a series of unlistenable bits of instrumental flatulence with such titles as A Treatise on Cosmic Fire, the jazz-rock fusion horrors that reduced his mass audience to a smallish cult. But even though he's dispensed with most of that this time out and returned to the irresistible pop treacle about unrequited love that made his initial reputation, the guru inside him clearly remains intact, so it is the spatial limitations of the medium, it would seem, that so convincingly create the impression that Todd is both endearing and intelligent. Scaled down in this way, his troubling obsessions seem mere eccentricities, charming rather than arrogant. This frees the viewer to concentrate on both his strengths (fine guitar playing, real skill as an arranger and leader) and weaknesses (cleverness for its own sake, a flakey stage demeanor that demonstrates what a Flower Child throwback he is), and as a result one gets a sense of Todd's overall artistic vision that is far more enlightening than any live album or concert documentary could ever be. In short, this is not just a record of some good music with accompanying pictures-it's good musical television, a hybrid whose full potential, it appears, is just beginning to be realized.

My only real complaint (you *knew* there was going to be one, didn't you?) concerns the special visual effects. Bill Etra, who handled them, is generally sparing in his approach, thank the Lord; most of the time they effectively illustrate the music, and they even maintain one's interest when the music gets a little out of hand. Even at their best, though, they are hardly more sophisticated technologically than the kind of trippy psychedelic gimmicks that were *de rigueur* for rock visuals during the halcyon days of Haight Ashbury. And I should add that I'm less than impressed with all that video "Art" everyone and his dog Eric seems to be doing in SoHo these days. But, since the nature of the performance Rundgren puts on does have more than a little in common with the rock/theater pieces of the mid and late Sixties (check out the pantomime stuff on Eastern Intrigue and you'll see what I mean), perhaps Etra's approach is deliberately anachronistic and the only way to go. I suppose I should reserve judgment on that score until I see some more of Visiondisc's productions. That cavil aside, however, this strikes me as an exemplary presentation of an artist good enough to deserve no less. I came away from it wishing I had been at the Bottom Line last May, and, given my reservations about Todd the performer, that means that somebody is doing something right. I suspect that if you already like him a little, "Live/Special" will make you fall on your face.

And let's see now . . . while we're on the subject, how about video cassettes of Elvis Costello, or Bruce Springsteen, or the Rolling Stones, or Bob Seger, or Neil Young, or Warren Zevon, or Graham Parker, or Tom Petty, or Talking Heads, or Jackson Browne, or

 $\ldots$  . well, you get the picture, I think (no pun intended). Any takers out there?

—Steve Simels

TODD RUNDGREN: Live/Special. Todd Rundgren (vocals, guitar, piano); the Hello People (vocals); Moogy Klingman (keyboards); John Siegler, Kasim Sultan (bass); John Wilcox (drums). Wouldn't Have Made a Difference; Black and White; Zen Archer; Can We Still Be Friends?; Couldn't I Just Tell You: Black Maria: Range War; Cry Wolf; I'm So Proud; Ooo Baby Baby; La La Means I Love You; I Saw the Light; Eastern Intrigue: Love in Action; Hello It's Me; Just a Victory. VISIONDISC RTR-946-3444-M, sixty-minute video cassette (mono) available in both Betamax and VHS formats, \$34.95 slow speed, \$44.95 fast speed (from Visiondisc Corp., P.O. Box 102, Cooper Sta., New York, N.Y. 10003).



Todd Rundgren at the Bottom Line



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A worthwhile investment? Kiss? Isn't that a contradiction in terms? No, not really. It is tempting to write Kiss off as merely the heirs to the audience commanded in the early Seventies by Grand Funk Railroad and later by Alice Cooper—the teenage rowdies to whom a bad Rolling Stone review of their heroes amounted to a badge of honor. It's tempting, but it's not entirely accurate, because for sheer crass exploitation of its fans Kiss is in a league by itself. But that's what makes Kiss such a healthy phenomenon: they're so upfront about being a scam.

Beyond that, though, Kiss' music is actually a lot better than it needs to be. These guys play with a fair amount of style, humor, and intelligence, and their records, if not works of art, are at least going to be remembered as endearing period classics, much like the ridiculous (and in retrospect obviously satirical) surf/car singles of Jan and Dean. A large part of rock is a gigantic, ludicrous joke, and nobody in this decade has understood that better than Gene, Ace, Paul, and Peter. Granted, that doesn't have quite the same sound as John, Paul, George, and Ringo, but who in his right mind would want it to? "Double Platinum" is recommended to residents of the Teenage Wasteland everywhere. S.S.

#### RECORDING OF SPECIAL MERIT

**BONNIE KOLOC:** Wild and Recluse. Bonnie Koloc (vocals); instrumental accompaniment. Rolt Me on the Water; Up Is a Nice Place to Be; Lie Down by Me; Golden Slumbers; and three others. EPIC JE 35254 \$7.98, <sup>(®)</sup> JEA 35254 \$7.98, <sup>(®)</sup> JET 35254 \$7.98.

Performance: Exceptional Recording: Very good

That title isn't just an idle pun but is a simplification of two sides of Bonnie Koloc, who is also musically contradictory and difficult to pin down. She's a treat to listen to almost all the time, though. The one thing that hurt this album, I thought, was her slowed-down, unaccompanied version of Jazzman (as part of Lucky Suite) which takes showing off of vocal prowess so far that you forget which song she's singing. But that's symptomatic of a basically healthy way she does things, as is a bit of funky stuff that works: Gene Autry's (Ray Whitley actually wrote it) Back in the Saddle Again. Bonnie's a kidder, but she's also very direct and sounds like she knows it's better to be outrageous than outraged. And she sings a wild range of notes with clarity and distinction and seems comfortable in a number of different song styles. There's a lot of Americana in this album, although it seems to be there by accident. Since there are so few true accidents, there could be a connection to the amalgam of styles that seem to have shaped Bonnie Koloc as a singer. Hers is an American voice if I ever heard one. N.C.

PATTI LABELLE: Tasty. Patti Labelle (vocals); vocal and instrumental accompaniment. Save the Last Dance for Me; Monkey See, Monkey Do; Eyes in the Back of My Head; and six others. EPIC JE 35335 \$7.98. <sup>(a)</sup> JEA 35335 \$7.98, <sup>(c)</sup> JET 35335 \$7.98.

Performance: Better than before Recording: Satisfactory

The main thing that keeps me from really enjoying Patti Labelle's new solo recording is (Continued on page 126)



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that I don't care much for the sound of her voice. There is an irritating, caterwauling edge to it that was not apparent on her group albums, possibly because of the vocal mix provided by Nona Hendryx and Sara Dash. This is not to say that her latest set has no redeeming qualities. In fact, it is a considerable improvement over her debut solo disc.

As might be expected, there are several tracks here that aren't much to listen to but might pass muster as "exercise music" in the run-of-the-mill disco vein, among them Save the Last Dance for Me and You Make It So Hard (To Say No). Eyes in the Back of My Head is an amusing romper in which Patti's nasal Minnie Mouse voice seems appropriate. But she is sufficiently skilled to alter her tone when she cares to. On Monkey See, Monkey Do, it is tempered to an appealing cuteness; on Quiet Time, the stridence falls within the acceptable range for gospel-flavored pop fare; the surprising softness of her voice on Little Girls might lead a listener to believe that some promising outsider had barged in on the session and snatched the microphone away from Patti. An unanticipated treat is a successful excursion into salsa on Teach Me Tonight (Me Gusta Tu Baile), in some respects the most interesting track to be found here, with nice support from Sheila Escovedo on timbales and Willie Colon on congas.

In sum, "Tasty" demonstrates Patti Labelle's potential as a solo performer, and at this point it appears that versatility is likely to become one of her assets. If she continues to move in this direction, my misgivings may well turn into outright respect for her talent if not her voice. *P.G.* 

#### LITTLE RIVER BAND: Sleeper Catcher (see Best of the Month, page 103)

KENNY LOGGINS: Nightwatch. Kenny Loggins (vocals, guitar); vocal and instrumental accompaniment. Nightwatch; Easy Driver; Somebody Knows; Angelique; Down in the Boondocks; and four others. COLUMBIA JC 35387 \$7.98, <sup>®</sup> JCA 35387 \$7.98, <sup>©</sup> JCT 35387 \$7.98.

Performance: Smooth - Recording: Voluptuous

There's a nice melodic flow about this, but it's all a bit overdone and slick for me. The songs range from Joe South's unpretentious *Down* in the Boondocks to some of Loggins' own most flamboyant noodlings yet, but they're all gussied up just a bit too much, and everything seems such a production that your attention is arrested by the wrong parts. There's music in it, all right, but it's under an overlay of studio sophistication and careful planning. It's as if there's a transparent wall between Loggins and the listener. N.C.

LOUISIANA'S LE ROUX. Louisiana's Le Roux (vocals and instrumentals). Take a Ride on a Riverboat; Love Abductor; New Orleans Ladies; Crazy in Love; Slow Burn; and five others. CAPITOL SW-11734 \$7.98, (8) 8XW-11734 \$7.98, (C) 4XW-11734 \$7.98.

Performance: Smooth Recording: Very good

You know how it is. Sometimes you're impressed with the musicianship more than you like the tunes, and even though you have to admit the tunes aren't bad, there's something that seems to come up short in one or another of them at just the wrong time. This album makes a great a cappella start, as Le Roux is strong on vocals, individually and, especially, together. But the songs that are attractive in the pretty sense, like New Orleans Ladies, tend to be thin and not so lively, and the "interesting" ones, like Love Abductor, are the kind that seem increasingly homely as they become increasingly familiar. Everywhere the lyrics are somewhere between early Poco and disco, meaning the less attention you pay to them the better off you'll be. But the musicianship is there, and so is a sound, and there's a lot of promise. When Le Roux gets its songs together as well as it has got its band NC together, it'll be all right.

DAVE MASON: Mariposa de Oro. Dave Mason (vocals, guitar); instrumental accompaniment. Don't It Make You Wonder; Searchin'; Warm and Tender Love; Share Your Love; and seven others. COLUMBIA JC 35285 \$7.98, (B) JCA 35285 \$7.98, (C) JCT 35285 \$7.98.

Performance: Treading water Recording: Very good

Dave Mason's too old for his mother to have been enraptured by Fleetwood Mac just before he was born, and too old to have been taken with Boz Scaggs' "Silk Degrees" in his formative years. Nevertheless, it sounds like the goal here was to slip five or six cuts unob-(Continued on page 128)



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126

LOUISIANA'S LE ROUX: strong vocals and solid musicianship



STEREO REVIEW

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"... And I want that tape recorder right out in the open where everybody can see it...."

trusively into the programming of the average FM rock station. That just might happen, and there's nothing wrong with "Mariposa de Oro" technically, but I can't make a very deep connection with it. In fact, it suggests that unrelieved good taste and technical facility can leave you just as hungry as too much grossness and ineptitude. But, one at a time, the songs should slip into radio programming as easily as a Big Mac slips down a teenager's throat. N.C.

RONNIE MILSAP: Only One Love in My Life. Ronnie Milsap (vocals, piano); instrumental accompaniment. Let's Take the Long Way Around the World; Back on My Mind Again; Only One Love in My Life; I'm Not Trying to Forget; No Relief in Sight; and five others. RCA AFL1-2780 \$7.98, @ AFS1-2780 \$7.98, © AFK1-2780 \$7.98.

Performance: **Good** Recording: **Good** 

Funny thing: country singers who play the piano don't sing slow songs very well (unless you count Charlie Rich as a country singer). Ronnie Milsap does it better than most, although there's a lackluster Once I Get Over You here to blemish this one. Not that it would otherwise be blemish-free, but it has, as they say, its moments. Milsap is one of the blacker-sounding country singers, and his repertoire doesn't sound quite like anyone else's, country or pop. Yet the songs are mostly fairly simple ones. He's been one of the toasts of Nashville in the last few years, possibly for the very reason that he sounds a lot more pop than country, which fits right in with Nashville's lusting after urbanity. Here Milsap performs as well as usual, but the thing excites me about as much as day-old bread does when I'm not in one of my lean periods. The one that's supposed to be exciting, Too Soon to Know, with its vocal uppercuts and orchestral didoes, is definitely the low point. But then the profile never gets very

high anywhere. It's a professional job, though, with several cuts that would go well on the radio somewhere between Grace Slick and Johnny Paycheck. N.C.

#### RECORDING OF SPECIAL MERIT

NATI MISTRAL Y LOS GEMELOS. Nati Mistral (vocals); Los Gemelos (vocals, guitars, percussion). Callecita Encendida; Zamba de Valderrama; Caballo de Paso; Adiós a la Llanera; Luna Tucumana; and five others. ALHAMBRA CPS 9553 \$5.98 (from Alhambra Records, 552 West 27th Street, Hialeah, Fla. 33010).

Performance: Excellent Recording: Good

If critics had the power the public attributes to them, the name of the great Spanish singing actress Nati Mistral would be a household word. "If Nati Mistral were American," Richard Dyer wrote in the Boston Globe, "Barbra Streisand would be looking for work." In the February issue of STEREO RE-VIEW, Peter Reilly included a Mistral album on his list of the best records of the stereo era and referred to her as the Maria Callas of the Spanish song. And wherever I could publish. I have been frothing at the mouth about her for years. She remains, however, in this country at least, a connoisseur's singer, a favorite of critics, and a cult figure for a small but avid American following.

This new album, recorded in Spain by Discos Columbia and released here by Alhambra Records, is an impressive addition to Miss Mistral's discography and an important addition to any Latin or international collection. It consists of ten folk-influenced popular songs from various parts of the Spanish-speaking world, all new to her recorded repertoire. They show off the beauty of her voice, her musicality, her superb diction, and her phenomenal interpretive gifts. I like all ten songs, (Continued on page 130)

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but I am especially fond of Amor Marinero (Sailor's Love), a sinuous tango that brings out her vocal flexibility and dynamic range, and Cisne Cuello Negro (Black-Necked Swan), which she sings with a dazzling display of power, phrasing, and long breath.

The singing twin guitarists Los Gemelos, Miss Mistral's frequent collaborators, provide suitably idiomatic backing, and the sound is fine. There are, alas, no texts or translations for gringos, but whether you know Spanish or not, if you appreciate good singing you'd better get this record.

-William Livingstone

#### RECORDING OF SPECIAL MERIT

MARTIN MULL: Sex and Violins. Martin Mull (vocals, guitar); vocal and instrumental accompaniment. Birds Gotta Swim; I Haven't the Vegas Idea; The Mother-in-Law Song; Westward Ho!; Cleveland (Revisited); and six others. ABC AA-1064 \$7.98, (1) \$8020-1064 (H) \$7.95, (1) 5020-1064 (H) \$7.95.

Performance: Very good Recording: Very good

Martin Mull is a humorist and actor who started in the early 1970's with a series of Warner Brothers albums that won him a cult following. His satire on blues singers (in which he played a ukulele with a baby bottle for a "slide" guitar effect and sang white as white can be) was brilliant. In the past few years he's become nationally known through several syndicated TV series—first Mary Hartman, Mary Hartman, in which he played a villain, then Fernwood 2 Nite, and now America 2 Nite, the latter two being talk-show spoofs with Mull as host.

Mull's humor is based on exploding the pretensions of people who don't have any right to their pretensions—small-town rubes looking for a hot night in Las Vegas, a clod who's proud of his trailer home, a big-town nerd trying to be Continental in sexual affairs. Mull's portraits of these people are distressingly accurate, cleverly written, and well performed. On "Sex and Violins" he satirizes the recording industry by introducing a character purportedly from the record company. This person assures Mull that the album won't sell, but I sure hope it does. Martin Mull is a very funny fellow. J.V.

JANE OLIVOR: Stay the Night. Jane Olivor (vocals); orchestra. Honesty; He's So Fine; Solitaire; Song for My Father; The Right Garden; and five others. COLUMBIA JC 35437 \$7.98, <sup>(3)</sup> JCA 35437 \$7.98, <sup>(3)</sup> JCT 35437 \$7.98.

Performance: Tame Recording: Elaborate

Whoever is guiding Jane Olivor's career is sending her up the garden path to the justanother-girl-singer gazebo. It would be sad to think of her languishing there, because she does have talent and that extra little something that makes a star. In the beginning of her career, not very long ago, she quickly became a cult figure with her intense, extravagantly dramatic performances that suggested Piaf and Streisand simultaneously. Whatever her faults were then—a rampant tendency to ham it up, a hyperenergetic, Moscow Art Players concentration that made a mortal storm out of every line—at least she had enor-(Continued on page 132)



# Here's another Empire 698 Turntable dashing off the assembly line.

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mous vitality and a certain lust for center stage that precluded boredom.

Here Olivor sounds so soft-spoken, vulnerable, and dazed with the wonder of her own feelings as she swoons through each song that one quite expects to find a little puddle of remorse under the speakers. The Piaf influences have been expunged and the remaining Streisand is the Streisand of Evergreen, leading to saccharine readings of such mush as Neil Diamond's Solitaire and Jason Darrow's Honesty. Olivor collaborated on writing two songs here, Let's Make Some Memories and The Right Garden, which are as drippy as Evergreen itself. But she has so narrowed her interpretive range that one can almost sing the next phrase ahead of her. Pity. PR

## ALAN PARSONS PROJECT: Pyramid (see Best of the Month, page 105)

ELVIS PRESLEY: Elvis Sings for Childrenand Grownups Too! Elvis Presley (vocals); instrumental accompaniment. Let Me Be Your Teddy Bear; Wooden Heart; Five Sleepyheads; Puppet on a String; Angel; Old Mac-Donald; How Would You Like to Be; and four others. RCA CPL1-2901 \$6.98.

#### Performance: **But mostly for children** Recording: **Variable**

This is a theme shuffling of reissues, one of many you'll probably be seeing. The ingredients for it come mostly from the soundtracks of those movies Elvis made that were so out of it, so irrelevant, that you halfway started to wonder if they were relevant in some far-out, B. Traven sort of way. Yes, one of them did indeed stoop so low as to have him sing Old MacDonald, which turns out to be something of a high point, musically, in the company of Puppet on a String and Wooden Heart. Elvis would sing anything and probably at one time or another did. On the other hand, the Elvis myth does seem to fascinate children, and I think his singing makes pretty good contact with certain children I know personally. And you could do a lot worse shopping for children's albums. Adults who tend to be analytical are advised to stay away from it, as the why that lurks behind it and so much of the seeming piffle Elvis attended to (with, all in all, quite a lot of care) tends to drive analytical types crazy. Don't ask me how I know. Hoo hah. N.C.

LIVINGSTON TAYLOR: 3-Way Mirror. Livingston Taylor (vocals, guitar); instrumental accompaniment. Going Round One More Time; L.A. Serenade; Gonna Have a Good Good Time; I Will Be in Love with You; I'll Come Running; Living Without You; and four others. EPIC JE 35540 \$7.98.

#### Performance: Liv is half alive Recording: Very clean

The biographical sketch that accompanies "3-Way Mirror" warns us not to view this collection of songs as representative of a "new and improved" Livingston Taylor. Well, there certainly isn't much new here except a more commercial pop setting with sweeping strings, glissandos, ooh's, aah's, and all that. And the only improvement I can detect is the increased clarity of the vocals—this time you can hear everything Liv has to say. The problem is that what he says doesn't come across with the same warmth and intimacy he gave us a few years back in such songs as *Lost in* 



LIVINGSTON TAYLOR Toying with vocal techniques

the Love of You and Harold Arlen's Over the Rainbow.

Livingston seems to be toying with different vocal techniques, mixing accents and experimenting with phrasing, and one expects this from an artist who's been on a five-year sabbatical from recording. But he just doesn't come alive. Some of the songs are partly to blame in that their choruses are too short and weak for the build-up they receive. In Living Without You, for instance, the entire chorus is merely the phrase "Living without you" repeated twice, and How Much Your Sweet Love Means to Me, a samba-style tune, ends with a whimpering "Oh, did I ever say/How much your sweet love means to me." Furthermore, it would have given the whole album a boost if the arrangements had been opened up for some solos or instrumental breaks. I mean, why use talented studio heavies like Lee Ritenour and Richard Greene and then limit them to rhythm-section duties?

On a more positive note, I am glad to report that there are three very worthwhile songs here. The opening track, Going Round One More Time, proves that Livingston can write a good hook. I Will Be in Love with You puts him in McCartney's class as a creator of endearingly silly love songs. And a hot little Motown item titled I'll Come Running shows that he can still get in the groove. But the best thing about "3-Way Mirror" is that Livingston Taylor is back. His greatest strength has always been his performing, which he will be doing plenty of as the opening act for the current Ronstadt tour, and I've got a hunch that there's nothing wrong with him right now that a little time on the road won't cure.

-Richard Sarbin

WEREWOLVES. Werewolves (vocals and instrumentals). The Flesh Express; Hollywood Millionaire; Too Hard; City by the Sea; Never Been to Hades; Silence; and five others. RCA AFL1-2746 \$7.98, (1) AFS1-2746 \$7.98, (2) AFK1-2746 \$7.98.

#### Performance: Werepoodles Recording: Okay

Andrew Oldham is one of the more colorful hucksters of our time, a sort of English Kim (Continued on page 136)

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<u>GM</u>

TIME has a way of casting a roseate haze over remembered joys, and the maxim that you can't go home again often turns out to apply as well to the popular pleasures of the theater, including the musical comedies that entertained us in days that were never, perhaps, so halcyon as we think they were. Still, it is a mistake to patronize the past, and even as I write this Broadway is packing them in at revivals of *The King and I* and *Hello*, *Dolly*, business is brisk off Broadway at such hits of old as *Pins and Needles* and *Once in a Lifetime*, and out at the Jones Beach Theater the crowds are assembling nightly for *Annie Get Your Gun*.

It's a propitious atmosphere for the rerelease of original-cast recordings, and RCA has been making the most of the opportunity with its Legendary Broadway Shows series. The latest trio of musicals to be dusted off for this purpose includes Rodgers and Hammerstein's 1947 offering Allegro and the 1952 revue Two's Company, in which Bette Davis returned to Broadway, both in beautifully restored mono sound, and, in stereo, Flora the Red Menace, which brought Liza Minnelli to the Great White Way for the first time way back there in 1965. All these records were in the catalog once, but they disappeared when sales fell off. Whether or not they were brought back "by popular demand," from the point of view of musical-comedy history it is good to have them out of the archives. How they hold up as entertainment is another matter entirely.

ALLEGRO was an experimental attempt to tell, in the bucolic, simplistic style of Our Town, the story of a small-town doctor's younger years, from babyhood to his being offered the post of physician-in-chief at a big Chicago hospital-a job he turns down in order to go home to the girl he really loves. Instead of realistic sets there were light projections and portable props, and a kind of Greek chorus commented on the action. Much of this seems as pretentiously unpretentious today as it did in 1947 when the show opened to mixed reviews, and the score has more than its share of sticky and slushy stretches, believe me. At the same time, there are some lovely interludes, such as when William Ching (in the role of the aspiring doctor's dad) sings the malechauvinist hit ballad A Fellow Needs a Girl, or when Lisa Kirk (as Emily, a Chicago nurse fond of delivering home truths) dispels the dewy sentimentality for several blessed minutes with The Gentleman Is a Dope. Additional relief is provided by Money Isn't Everything, a waltz set to "an untypically sardonic Hammerstein lyric," as annotator Alfred Simon points out.

Allegro turns out not to be the buried treasure some of its champions through the years have claimed it was, but it does have its moments, and the original-cast performances are splendid, especially those of John Battles as the doctor who gives it all up for love, Gloria Wills as the wrong girl who becomes his wife, and Annamary Dickey as his doting mother. Roberta Jonay, as Jennie, the model hometown sweetheart, appropriately keeps her mouth shut most of the time.

In quite another mood is the musical revue Two's Company, which brought Bette Davis back to the musical theater for the first time in twenty years (she had enjoyed top billing in the summer-stock Cape Cod Follies way back in 1929 and soon after appeared in several Broadway flops before making it in the movies at Warner Brothers). Two's Company was in one kind of trouble or another from the time the leading lady's planned return to the stage was first announced, causing one critic to comment that it was as though Sarah Bernhardt were coming back to do Hellzapoppin' on roller skates. Davis got sick, threatened to drop out, and actually passed out on opening night after her first number. She revived and gamely went through with it, however, and her fans were not disappointed.

The songs are mostly by Vernon Duke with

who gives up socking cops and making Bolshevik speeches to settle down in the end to a commercial-art job in the advertising department of a fancy New York store on Fifth Avenue. Bob Dishy plays Harry Toukarian, the stammering young Demosthenes who takes Flora to her first cell meeting and falls in love with her. Though Flora pulls all its political punches, it is fairly entertaining on the musical level. The songs are not the kind you are likely to go around humming later, but they're pleasant enough to hear again, especially A Quiet Thing, with Liza at her most attractively subdued best; Hello Waves, with the artfully comic Dishy singing to the sea with pebbles in his mouth; a tender musical valentine called Dear Love; and a series of ex-



lyrics by Ogden Nash, but there are additional lyrics by Sammy Cahn and several tunes by Sheldon Harnick. The show was staged by Jules Dassin with the help of Jerome Robbins and Charles Sherman. And the star, whose husky cigarette baritone all too often sounds like a parody of itself, is surrounded by firstrate soloists and an excellent ensemble. But the score is one of Duke's least inspired ones, and Nash was not up to his usual standard either. The revue is a series of period lampoons on such subjects as the impractical aspects of architecture by Frank Lloyd Wright, the ordeals of Sadie Thompson, the harmonics of hillbillies, and the shortcomings of the male sex. Davis is interesting to hear, if only for her courage, but the only real singing is provided by Ellen Hanley in the torchy Haunted Hot Spot.

Compared with Allegro and Two's Company, Flora the Red Menace, for which Liza Minnelli's favorite team Kander and Ebb supplied the songs, sounds surprisingly alive after thirteen years. The plot concerns a group of cute kids who join the Communist Party in the Depression year of 1933, with Liza in the role of a young artist and class valedictorian uberant, Blitzstein-derived ditties to supply the right Union Square ambiance, with our girl right in there belting away among the comrades. Communism in the 1930's was never quite so cute, so innocent, or so appealing an affair as it's made out to be in *Flora*, but as a record album the whole thing holds up rather better than we had any right to expect.

—Paul Kresh

ALLEGRO (Richard Rodgers-Oscar Hammerstein II). Original-cast recording. John Battles, Lisa Kirk, others (vocals); chorus and orchestra, Salvatore Dell'Isola cond. RCA @ CBM1-2758 \$7.98.

TWO'S COMPANY (Vernon Duke-Ogden Nash-Sammy Cahn). Original-cast recording. Bette Davis, Hiram Sherman, others (vocals); chorus and orchestra, Milton Rosenstock cond. RCA @ CBM1-2757 \$7.98.

FLORA, THE RED MENACE (John Kander-Fred Ebb). Original-cast recording. Liza Minnelli, Bob Dishy, others (vocals); orchestra, Harold Hastings cond. RCA CBL1-2760 \$7.98.

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Fowley who made it. Trouble is, he made it quite a few years ago as manager and producer of the embryonic Rolling Stones, who unceremoniously dumped him about 1967 and went on to make the series of albums on which their reputation will someday undoubtedly rest. Opinions on the depth of his contribution to the success of the Stones vary. Some say that he lived out all his most outrageous fantasies through Mick Jagger and Brian Jones; others reckon that it all would have happened pretty much the same way without him. One thing is certain, however: he was never much of a producer, and the real production chores on the Stones' classic early records were delegated to the various engineers-notably Ron Malo and Dave Hassinger-whose services he was smart enough to enlist.

Since then, Oldham has mostly been a dabbler. There have been a few production efforts-the Jimmy Cliff live album, for one, which was abominable-but not much else. Now he has come back at the helm of a band that he has apparently convinced the good folks at RCA is going to be that most tedious of items, the (you guessed it) Next Rolling Stones. I wouldn't take bets on it. The Werewolves (not a bad name, actually, but unfortunate in view of Warren Zevon's Werewolves of London hit) are an agreeable, mainstream guitar band à la Bad Company or Aerosmith, with some of the same blues roots as Oldham's first charges. They probably sounded very good in the bar where he most likely discovered them. Beyond that, though, they have absolutely no sound of their own, and the only interesting thing about the whole venture will be seeing if Oldham can still manipulate the media with the same flair he demonstrated in the old days. For the moment, however, rest assured that the Werewolves are just a group, not a way of life. S.S.

#### RECORDING OF SPECIAL MERIT

TAMMY WYNETTE: Womanhood. Tammy Wynette (vocals); instrumental accompaniment. Womanhood; That's What Friends Are For; You Oughta Hear the Song; What's a Couple More; I'd Like to See Jesus (On the Midnight Special); Mem'ries; and five others. EPIC KE 35442 \$6.98, <sup>®</sup> EA 35442 \$7.98, <sup>©</sup> ET 35442 \$7.98.

Performance: Vintage Wynette Recording: Very good

This is Tammy Wynette's best recording in a while in that it typifies her; it's a good-quality cross-section of what she does, the kinds of songs, the instrumental sound, the vocal mannerisms and decorations. She's followed the "Tammy Wynette album" formula before, of course, but the difference is that these are not mostly token songs but real ones, engaging enough to engage Tammy. And when that happens, you hear in her the oddest mixture of toughness and vulnerability. Of course, I'd Like to See Jesus (On the Midnight Special) is outrageous, but so is one facet of Wynette. looking to perk people up, shock their eyebrows. Yet, as a couple of decent hurting songs let you into another facet of her, you see, or hear, a kind of little-girl insecurity. And she's never sung better than she does here, never more stylishly, never more slyly. N.C.

(Continued on page 138)

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(List compiled by John Harrison.)



SGT. PEPPER'S LONELY HEARTS CLUB BAND. Original-soundtrack recording. Peter Frampton, the Bee Gees, George Burns, Steve Martin, Aerosmith, Earth, Wind & Fire, others (vocals and instrumentals). The Long and Winding Road; A Day in the Life; Golden Slumbers; Carry That Weight; Get Back; Polythene Pam; Oh! Darling; and twenty-one others. RSO RS-2-4100 two discs \$15.98, \$T-2-4100 \$15.98, CT-2-4100 \$15.98.

Performance: Thoroughly awful Recording: Swell

Someone at *Rolling Stone* whose name now escapes me once reviewed "The Archies' Greatest Hits," admittedly an easy target, with almost haiku-like pithiness: "Herein are contained twelve convincing arguments against the Capitalist System." Up the figure to twenty-nine, and you've got a pretty good idea of the magnitude of the turkey that is "Sgt. Pepper." It's pointless to moan about it, though. The project was, as anyone with even reasonably normal sensibilities knew all along, doomed from the start. All you can do is marvel at just how thoroughly awful it turned out to be. You have to work hard, it appears, to make the most utterly indefensible album of the Seventies, especially given the competition. But Robert Stigwood (a bow to whatever direction Australia is in), the Bee Gees, Peter Frampton, and everyone else connected with this project have achieved the apotheosis of mediocrity, and for that they merit respect, if nothing else, from mere mortals like you and me. Think of it: Stigwood brought it home a hit and there isn't a single disco song to be found on the entire album! Clearly, the man is a Titan of Our Time.

As for the performances enshrined within the jacket of RSO 4100, little can be said; if there is any justice in this life, none of the stars responsible will ever be taken seriously by anyone again. Frampton sings *The Long* and Winding Road with all the soul and feeling of a three-day-old mackerel, Robin Gibb warbles *Oh! Darling* as if he had just O.D.'d on helium and belladonna, Alice Cooper wreaks Phantom-of-the-Opera havoc with *Because*, and a host of deservedly obscure newcomers sleepwalk through the rest.

Oh sure, you can bewail the fact that impressionable children will come away believing that "Sgt. Pepper" has some connection with the Beatles. You can cry that the once unblemished reputation of hero-producer and all-around good guy George Martin is now irredeemably smirched. But does any of that matter? Hardly. Because, when you get down to it, "Sgt. Pepper" is about one thing and one thing only: it is the ultimate validation of H. L. Mencken's immortal dictum, "Nobody ever went broke underestimating the intelligence of the American public." But anybody who knowingly pays for this crime against nature should be publicly dunked. S.S.

STAR WARS (John Williams). Music from the film. John Rose (organ). DELOS DEL/F25450 \$7.98.

Performance: Very good Recording: Exceptionally good

There are so many versions of John Williams' hectic, hard-breathing score for Star Wars already on the market that you'd think still another could be nothing but gratuitous. Here John Rose, organist of Trinity College in Hartford, Connecticut, plays the whole thing on the Austin organ at Hartford's Cathedral of St. Joseph in a special arrangement by Robert Edward Smith. The organ contains more than 8,000 pipes, and while there must be more exciting music to be played on it than that dreary old Star Wars theme, Rose certainly makes the most of his opportunity. The fighter attacks and battles in outer space elicit appropriate shudders and groans with all stops out, but most of the time he adopts a surprisingly subtle and subdued approach to a score that is not long on understatement. The result is less nerve-wracking than I expected, and it's a treat for organ buffs. P.K.

#### RECORDING OF SPECIAL MERIT

WHITE MANSIONS. Waylon Jennings (vocals, guitar); Steve Cash (vocals, harmonica); John Dillon (vocals, guitar, keyboards, dulcimer, fiddle); Jessi Colter (vocals); Eric Clapton (guitar, dobro); Bernie Leadon (guitar, banjo, mandolin, dobro, steel); other musicians. Story to Tell; Dixie, Hold On; Join Around the Flag; White Trash; The Last Dance and the Kentucky Racehorse; Southern (Continued on page 140)



At the very edge of audio technology is exactly where the new Yamaha A-1 Amplification System stands.

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Boys; and nine others. A&M SP-6004 \$7.98, AAM 6004 \$7.98, AAM 6004 \$7.98, AAM 6004 \$7.98.

#### Performance: Very good Recording: Very good

As music this is better than average, and as a glimpse into history, it is even better than a Classics Illustrated. It is a project, an album and a booklet. Glyn Johns produced the sonic part and Paul Kinnerley produced the text, including the lyrics, and put together the booklet, which has some authentic photos by Matthew Brady and others and some posed ones of our singer-actors: Jessi Colter, the Southern Belle who is left behind (eventually to perish) by Matt Fuller, played by John Dillon (who goes off thinking these Yankees will be a pushover and winds up a post-war outlaw); Waylon Jennings, the drifter, a wounded vet of the Texas war who sort of narrates and comments from time to time (it would be a better-sounding album, of course, if he did more of the singing); and Steve Cash, the Ozark Mountain Daredevil who plays Caleb, one of the South's white-trash volunteers (he winds up sick of killing and pulpit-bound).

The thing is told from the Southern angle of view, but realistically (which, of course, may be the most romantic way of all, from that angle); it does not bother with the baloney about states' rights so dear to the heart of the Southleaning history teacher who tried to teach me this subject in college (I always figured she had been in Georgia when Sherman's men came through, pillaging and burning and raping, and nobody laid a hand on her, and that was her problem-she was about the right age). I don't know what else they have in mind for the project, movie- or TV-wise, but story lines a lot worse have attracted some attention, and so, needless to say, has some much worse music. The thing seems to need more music, though; it's edited awfully tightly, and there are big historical time gaps. It would have been worth the effort and delay to make a two-disc album of it, allowing for coloring in more of the sketches and whatnot. As it is, it should get those kids' noses out of N.C. their history books.



GATO BARBIERI: Tropico. Gato Barbieri (tenor saxophone); orchestra, Dale O. Warren arr. and cond. Where Is the Love; Bolero; Evil Eyes; and four others. A&M SP-4710 \$8.98, AAM 4710 \$7.98, AAM 4710 \$7.98.

Performance: Plop plop, fizz fizz Recording: Good

Argentinian tenor saxophonist Gato Barbieri made his reputation as a jazz player in the early Sixties, when he lived in Europe and performed with such American artists as Ted Curson and Don Cherry, but by the early Sev-

enties it was clear that he was heading along the pop route. Now the composer of the music for Last Tango In Paris (for which he won a Grammy) has come under the diluting spell of David Rubinson & Friends, Inc., the organization that over the past few years has been watering down Herbie Hancock's music, and his new album finds his robust tenor in a frame that would have been eminently suitable for the late Freddy Gardner. Too bad. C.A.

GARY BARTZ: Love Affair. Gary Bartz (clarinet, alto saxophone, sopranino, percussion, vocals); George Cables, Nate Morgan (keyboards); Wah Wah Watson, Juewett Bostick (guitars); Patryce Banks, Sybil Thomas, Beloyd Taylor (vocals); other musicians. Big Apple Love; Penelope; At Last; and three others. CAPITOL SW-11789 \$7.98. (1) 8XW-11789 \$7.98, (2) 4XW-11789 \$7.98.

#### Performance: Mostly miserable mush Recording: Okay

Gary Bartz used to play jazz, and he was very good at it; recently, however, he has switched to a sort of funk-pop style, which in itself is not a major sin except that he is very bad at it. Bad? No, dreadful. To be as fair as possible, I listened to this album as a "pop" release, but viewed from any angle it just doesn't make it. It is ridden with simplistic clichés and fifthgrade lyrics sung by Bartz and a chorus of undistinguished voices, and much of it, especially Bartz's four compositions, sounds like amateur night in Dubrovnik. Only Penelope, by Agusto Aiguero, and John Coltrane's Giant Steps show any signs of the talent Gary Bartz used to exhibit. This is one "Love Affair" not to remember. CA

#### RECORDING OF SPECIAL MERIT

BILL EVANS: New Conversations. Bill Evans (keyboards). Song for Helen; I Love My Wife; Reflections in D; After You; and four others. WARNER BROS. BSK 3177 \$7.98, <sup>(3)</sup> M8 3177 \$7.97, <sup>(2)</sup> M5 3177 \$7.97.

#### Performance: New topics, too Recording: Very good

In 1941 Victor issued a most unusual record by "Sidney Bechet's One-Man Band," on which Bechet played The Sheik of Araby, performing-by way of overdubbing-on six instruments simultaneously: piano, drums, soprano saxophone, bass, tenor saxophone, and clarinet, in that order. Without the benefit of tape and multiple tracks, however, the record was not very satisfactory from a technical standpoint. The Bechet recording was undeniably a gimmick, and, on the whole, not a particularly good record, but the three separate reed instruments, interwoven to create one voice. held a certain fascination. Multipletrack tape machines have, of course, made this sort of thing common today, and there is some validity to the argument that having a musician play along with a canned performance-whether it be his own or someone else's-deprives the end result of spontaneous rapport. But the technique can also be employed to advantage, as it is in Bill Evans' "New Conversations."

This album marks Evans' debut on Warner Bros., but it's actually his third set of "conversations" for four or six hands ("Conversations with Myself" and "Further Conversations with Myself" were released on Verve in



BILL EVANS Six profoundly artistic hands

1963 and 1967, but have since been deleted). Evans has a marvelous sense of dynamics, and he imbues his performances with a wide range of emotions; he'll attack a melody with fire and passion, then turn around and tiptoe out of a chorus with delicate grace. Then, too, he has a penchant for lovely melodies and a wonderful talent for writing them-his Song for Helen (dedicated to his friend and longtime manager/producer Helen Keane), played on one electric and two acoustic keyboards, bears that out, as does his one-piano rendering of Duke Ellington's rarely heard Reflections in D. I have never thought much of the electric piano as a jazz instrument, but Evans uses it both sparingly and well. On Maxine, a waltz for his daughter, he combines it with two acoustic tracks so that it sounds like a guitar and reminds one of the guitar/piano sound that was so popular in the heyday of the King Cole Trio.

There seems to be a resurgence of interest in Bill Evans these days (new releases and reissues have doubled my collection of his albums within the last couple of years) as a generation raised on the Beatles and the Stones discover what many of us have enjoyed for two decades: his timeless, exquisite music, his profound artistry. Can six hands play better than two? When they all belong to Bill Evans, the answer is a resounding yes. C.A.

TOMMY FLANAGAN: Alone Too Long. Tommy Flanagan (piano). Parisian Thoroughfare; Here's That Rainy Day; Maybe September; Billie Holiday Medley—Glad to Be Unhappy/No More/That Old Devil Called Love; and four others. DENON/PCM YX-7523-ND \$14 (from selected audio dealers).

#### Performance: **Too detached, perhaps** Recording: **Very good**

Tommy Flanagan has appeared on countless recordings as a sideman or accompanist and with his own trio, but this is his first extended solo outing. It's pleasant enough, but I think Flanagan missed the rhythmic support as much as I do when I listen to him go it alone; without a bass to move him along, he plays in a staccato style that borders on noodling. He is a fine player, however, very lyrical and very sensitive throughout this album, particularly on the Billie Holiday medley.

The notes accompanying this Japanese import (recorded in New York last December) make much of the technique used in the re-



د 7

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cording. It is called pulse-code modulation (PCM), and, with special equipment developed by Nippon Columbia, the master is recorded on two-inch video tape using a standard broadcast-type video-tape machine. The result is fine, but if the notes hadn't told me I would never have known. CA

EGBERTO GISMONTI: Sol Do Meio Dia (see Best of the Month, page 103)

SCOTT HAMILTON: Swinging Young Scott. Scott Hamilton (tenor saxophone); Warren Vache (trumpet); John Bunch (piano); Michael Moore (bass); Butch Miles (drums). Thru' for the Night; Warren's Rush; Liza; Blues for Mastertone: and four others. FAMOUS DOOR HL-119 \$8 (from Harry Lim Productions, 40-08 155th Street, Flushing, N.Y. 11354).

Performance: Good Scott Recording: Very good

SCOTT HAMILTON: Scott Hamilton, 2. Scott Hamilton (tenor saxophone); Nat Pierce (piano); Monty Budwig (bass); Cal Collins (guitar); Jae Hanna (drums). East of the Sun; I Want to Be Happy; Love Me or Leave Me; The Very Thought of You; There Is No Greater Love; and five others. CONCORD JAZZ CJ-61 \$7.98.

Performance: Great Scott Recording: Very good

He has the impeccable taste, full-bodied sound, and robust attack of the Swing Era's star tenor men, and he plays in a style that reached maturity in the late Thirties. But Scott Hamilton just turned twenty-four. If you add all that up, you will understand why his recent emergence has answered the prayers of all who clung to the memories of Coleman Hawkins and Ben Webster in their prime, convinced that they would never hear the likes of that sound again. Sure, Hamilton's style of playing is highly derivative, even bordering on imitation, but he is well equipped with fresh ideas, and he has mastered the language of the great tenors to an amazing degree. The young keeper of the flame has already appeared on numerous Famous Door and Concord Jazz albums as a sideman and once on the former label as a leader. Now each of these labels-staunch perpetuators of manifestly swinging, unpretentious jazz-has released a new album of Hamilton heading up a quintet. Each has different sidemen and slightly different instrumentation, but the results are the same: free-flowing, rich-as-butter, small-band swing as relaxing as a warm bath.

The Famous Door release, "Swinging Young Scott," has pianist John Bunch heading a solidly swinging rhythm section and features Warren Vache on trumpet. Vache plays with a great deal of drive and fluency, occasionally revealing a slight bop influence but generally staying in the Roy Eldridge/Charlie Shavers mode. Vache and Hamilton work very well together, but the latter has the edge. A Hamilton/Eldridge recording simply has to be arranged (the two have worked together, but I don't believe any of their collaborations were recorded).

Guitarist Cal Collins-who worked with Hamilton in the Benny Goodman band-joins Nat Pierce, Monty Budwig, and Jake Hanna to support Hamilton on the Concord Jazz al-bum, "Scott Hamilton, 2," which is both a mellower and a longer set (seven minutes and



fifty-three seconds longer, to be exact). The tempos are slower—more comfortable for Hamilton, it seems—and the emphasis is on ballads. The rhythm section is also smoother here, and Cal Collins, who plays both electric and acoustic guitar, contributes some superb solos. I recommend both albums highly, but if it came to a choice, I would unhesitatingly take the Concord Jazz release. C.A.

HERBIE HANCOCK: Sunlight. Herbie Hancock (vocals, keyboards); Tony Williams, Harvey Mason (drums); Wah Wah Watson, Ray Parker Jr. (guitars); Bennie Maupin (soprano saxophone); other musicians. I Thought It Was You; Come Running to Me; Sunlight; No Means Yes; Good Question. Co-LUMBIA JC 34907 \$7.98, (B) JCA 34907 \$7.98, (C) JCT 34907 \$7.98.

QUETO

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Performance: Banal Recording: Very good

In recent years, it has seemed that there were really two Herbie Hancocks. The first and more compelling figure is the young man who emerged in the late Sixties as one of the most promising graduates of the University of Miles Davis; he was a coolly experimental yet solidly based jazz musician. The second Hancock, exemplified by the best-selling album "Head Hunters" (Columbia KC 32731), relies heavily on electronic devices and leans toward simplified licks, which has made him a successful *emigré* in the nebulous world of crossover music.

Now, on his latest album, we are introduced to yet another Hancock. Herbie the singer, and in a disco groove at that. This one we could really do without, for somehow Hancock the musician has been buried beneath the formidable barrage of electronic equipment he commonly employs. This time around, he passes his voice through a synthesizing mechanism to produce a sound that is vaguely interesting, but mainly from the standpoint of novelty. And though the melodies have a simple appeal, they are hardly more than what one might expect from somebody with much less talent. There is one burst of real music, meaning some improvisation and content, on the final track, Good Question, which is sparked by Tony Williams' work on drums, but it doesn't make up for the banality that prevails everywhere else. P.G.

#### RECORDING OF SPECIAL MERIT

BAIRD HERSEY AND THE YEAR OF THE EAR: Looking for That Groove. Baird Hersey (guitar); the Year of the Ear (instrumentals). Partings; Tibet; Invisible Man; Greedy; and four others. ARISTA/NOVUS AN 3004 \$7.98.

Performance: Excellent Recording: Very good

Baird Hersey made an impressive debut with a 1975 album entitled "The Year of the Ear" (Bent BRS1), which never received proper distribution, but which I gave a most favorable review in these pages. Now he is back, and this time on Arista's new Novus label, which should assure him of a wider market. How fortunate, then, that this is such an excellent album. Hersey is a good guitarist, and he proves that on *Greedy*, but he is first and foremost an interesting composer and a fine, imaginative arranger. The Year of the Ear is an eleven-piece band, which has been augmented by four musicians for this album and



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has had an almost complete turnover of personnel since the 1975 sessions. The newer band is by far the more cohesive, but the greatest improvement is in the rhythm section (which consists of bass and percussion, for Hersey omits keyboards altogether). Again, Hersey has found interesting soloists to frame with his brassy, pungent arrangements, most notably trumpeter Kenny Mason and saxophonist Stan Strickland, but bassist Ernesto Provencher and saxophonist Len Detlor who was on hand for the first album as well deserve special mention too.

For all I know, Hersey's group may exist only in the recording studio, but I hope not. It deserves the prominence that this album just might give it. C.A.

#### RECORDING OF SPECIAL MERIT

**DUKE JORDAN:** Duke's Delight. Duke Jordan (piano); Richard Williams (trumpet); Charlie Rouse (tenor saxophone); Sam Jones (bass); Al Foster (drums). Truth; Undecided Lady; In My Solitude; and three others. IN-NER CITY IC 2046 \$7.98.

#### Performance: Our delight, too Recording: Good

Duke Jordan received his basic training at the dusk of the Swing Era, playing with Al Cooper's Savoy Sultans and a sextet led by Coleman Hawkins at Monroe's in Harlem. He joined the bop movement early and became one of its leading keyboard exponents, taking a trail blazed by Bud Powell but not following it quite as strictly as most of his colleagues did. Jordan worked with Charlie Parker on a fairly regular basis for three years in the Forties, recording with him for Savoy and Dial (including many sides recently reissued on Savoy and Warner Bros.) and touring with him as part of Norman Granz's Jazz at the Philharmonic. He has also recorded on his own--for Signal, Blue Note, and Charlie Parker Records-and as a sideman with Cecil Payne, Sonny Stitt, and Charles McPherson.

'Duke's Delight'' was recorded in New York three years ago by the Danish Steeple-Chase label, but it could just as well have been taped twenty years ago. That isn't meant as a put-down; it's merely a statement of fact, and in these days of crossover music, fusion jazz, fusic, or whatever they'll think of calling it next week, it might even be taken as a compliment. Dates such as this one-straightforward with a round of solos sandwiched between opening and closing head arrangements-were common (perhaps too common) during much of the Fifties and well into the Sixties, but the maturation of rock and the introduction of a fast-growing variety of electronic accessories and instruments changed the public's taste. Today this type of uncomplicated session is regarded as old-fashioned by many (what? no back-up singers? no overdubbing? no computerized simulators?), but jazz lovers will find it a sound for sore ears.

Jordan is a fine composer—his Jordu is a bop standard—and he wrote all but one of the selections in this set. The exception, Duke Ellington's In My Solitude, is also the only track that doesn't feature the quintet. Jordan plays it unaccompanied and gives it a beautiful reading, with just a touch of the Ellington piano style. Good solos are taken by all throughout the rest of the album. Tenor saxophonist Charlie Rouse should be recorded more often in this context, and trumpeter Richard Williams should be recorded more often, period. C.A.

BUD SHANK: Heritage. Bud Shank (alto saxophone); Bill Mays (piano); Bob Magnusson (bass); Steve Schaeffer (drums). If I Were a Bell; Dearly Beloved; Elsa; My Ship; and four others. CONCORD JAZZ CJ-58 \$7.98.

Performance: Solid Recording: Very good

Bud Shank was born in California, and that's where he has remained for most of his life. He is very active as a film and record session man and as a composer of jingles, but fortunately he also finds time for some straightforward jazz. A fine alto and an excellent flute player, he is a founding member of the L.A. Four, that wonderfully cohesive group with Laurindo Almeida, Ray Brown, and Shelly Manne, and he also leads groups of his own.

This album was presumably recorded recently (I wish Concord Jazz would start giving us dates), and it features Shank's Parker-oriented alto with the Bill Mays Trio. Except for an awkward, ragged opening chorus on the old Tommy Dorsey theme, I'm Getting Sentimental Over You, it's smooth sailing as Shank breezes through a program of seven familiar standards and one oddity, Elsa (which was introduced by Bill Evans on his 1961 Riverside album, "Explorations," and has since all but disappeared). There is an intimate feeling about this album; Shank and the Mays three are obviously no strangers to each other, and it's delightful to hear bassist Bob Magnusson in this context. He worked with Shank in 1970-1971, when they both toured with Sarah Vaughan, and I hope he is present on Shank's next album-or vice versa. CA

PAUL WINTER: Common Ground. Paul Winter (vocals, soprano and alto saxophones, contrabass sarrusophone, harmonium); Steve Gadd (percussion); Paul McCandless (oboe, English horn); Oscar Castro-Neves (guitars, bass. keyboards); David Darling (cello); other musicians. Ancient Voices; Ocean Dream; Eagle; Icarus; Midnight; Trio; and six others. A&M SP-4698 \$7.98, <sup>®</sup> AAM 4698 \$7.98, <sup>©</sup> AAM 4698 \$7.98.

#### Performance: Interesting and inventive Recording: Excellent

Just as there has always been integrity in Paul Winter's work, there has also been a peculiar kind of generation gap that has denied him the kind of broad-based success he deserves. He started off on recordings with his own jazz group, playing beautifully but in a style grounded in an earlier time. He hasn't been too active lately, but this new album is a success on every count. It is an interesting and inventive blend of the natural sounds (or songs) of such animals as the humpback whale, the African fish eagle, and the timber wolf with Winter's own vocals and various instrumentals. He's assisted by a number of very fine musicians, and some of the effects they create are truly memorable. The problem is that it all seems to be five years too late, and in pop music that is a couple of generations. Artists should be released from the "tyranny of relevance," but the audience Winter needs always demands immediacy. Still, "Common Ground" is worth listening to as an example of beautiful craftsmanship. P.R.

(Continued on page 146)
# THE INSIDE STORY ON HOW AKAI MAKES RECORDED HISTORY.

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XCEPT as vocalists and pianists, women have been all but excluded from participation in jazz, a situation that becomes strikingly evident when one examines the "Women in Jazz" series recently released by Stash Records. Along with the previously released tworecord set "Jazz Women: A Feminist Retrospective" (Stash ST 109), the three new discs contain performances by virtually every woman who ever played jazz, and aside from the pianists, most of whom recorded with some regularity, these five discs (the contents of that first two-record set are not listed here) contain very nearly all the recordings ever made by female jazz instrumentalists, including quite a few that never before saw commercial release. Measure that against the more than 200,000 jazz recordings made since 1917 and a picture of gross discrimination comes into sharp focus.

The jazz world has always been maledominated, even on the non-playing levels (can you name a female jazz critic?\*), and when women have been employed, it was often as a decoration or gimmick. "You weren't really looked upon as a musician . . . there was more interest in what you were going to wear or how your hair was fixed," vibraphone player Marjorie Hyams remarked recently. "They just wanted you to look attractive, ultrafeminine—largely because you were doing something they didn't consider feminine."

Hyams was a member of Woody Herman's celebrated 1944-1945 orchestra—the so-called first "Herd"—and thus one of the few women to be hired as a regular instrumentalist in a major, otherwise all-male band. She is heard

\*Yes: Morgan Ames, who reviewed for this magazine from December 1965 to December 1966. And Marian McPartland has always had more than one string to her bow. -Ed. on six selections in the first volume of the Stash series, "All Women Groups," and she solos on an aircheck of Herman's Northwest Passage that is included in the third volume, "Swingtime to Modern." A fine player of the Lionel Hampton school, Marjorie Hyams could certainly have had a longer, more rewarding career in jazz if attitudes had been different or if she'd been a man, and the same can be said of quite a few of the women represented on these records.

L'Ana Webster-who became L'Ana Hyams after marrying Marjorie Hyams' brother-was up against even greater odds, for she played the tenor saxophone (definitely not considered a ladylike instrument, even today). But there's nothing wrong with her spirited solo on You're Giving Me the Run-Around (Volume 3), one of four sides she cut for Decca with the otherwise all-male Mike Riley and His Round and Round Boys band in 1938. She is more subdued but no less effective on six sides by the Hip Chicks (Volumes 1 and 3), recorded for the Black and White label in 1945.

Judging by those same selections, trumpeter Jean Starr had a great deal to offer; her work on Seven Riffs with the Right Woman is particularly effective. Speaking of trumpet players, Volume 1 also contains two decent examples of Norma Carson's work. The Man 1 Love and Cat Meets Chick. But, good as those 1954 sides are, Carson played infinitely better at an informal jam session I attended in Iceland that same year, which brings up an important point: most of the women heard on these Stash releases were given little opportunity to display their talent on records, so it is quite possible that we are not hearing them here at their best.

That, however, is not the case with Valaida Snow, a trumpeter and vocalist who had one of the most remarkable careers in jazz. Snow began performing professionally around 1920. She worked in Shanghai in 1926 and toured Russia, the Middle East, and Europe between 1929 and 1932, when she made her first recordings (with the Washboard Rhythm Kings). She went to England with the Blackbirds Revue in 1934, then made several Atlantic crossings during a period in which she played for films in Hollywood and cut records in London for Parlophone. The selections reissued here, Caravan and My Heart Belongs to Daddy (both Volume 3), were recorded for Sonora in Stockholm in 1939, and they show to full advantage both sides of Snow's considerable talent, her hot, growling trumpet style contrasting with her soft, sweet voice. The following year she made six sides for the Danish Tono label before the Nazis sent her off to a concentration camp. Released in mid-1943, Snow was allowed to return to the U.S., where she resumed her career until her death in 1956. EMI would do well to reissue her Parlophone recordings.

Two of the most satisfying recordings in a more modern vein are A Woman's Place Is in the Groove and Body and Soul (Volume 1), which were recorded in 1946 and feature extraordinary performances by trumpeter Edna Williams and a violinist identified as "Ginger Smock or Emma Colbert." I don't know either of them—and the liner notes on all three albums generally avoid biographical information—but they should not have been as neglected as they obviously were.

Two big bands, the Mills Cavalcade Orchestra and the International Sweethearts of Rhythm, are represented. The Mills band, a mixed group led by trombonist George Brunis, is heard on Volume 3 in two recordings made for Columbia in 1935; it was a fairly dull band, playing dull arrangements as accompaniment to a dull vocal group. On the other hand, the Sweethearts of Rhythm-a band that boasted black, white, and Oriental members and had its origin in 1940 at Piney Woods College, Mississippi-was excellent. It played with precision, it swung, and it featured fine solo work, particularly by saxophonist Viola Burnside, who blows up a storm on Vi Vigor. As represented by two sides on Volume 1 and two even better sides on Volume 3. the group easily measures up to any all-male band, and it's better than most. But where did they get a title like Digging Dyke?

**O**<sub>BVIOUSLY</sub>, I cannot mention all the women represented on these albums, but I would be remiss if I didn't at least point out the excellent work by guitarist Mary Osborne on Volume 1, the fine piano performances of Beryl Booker (including one with Miles Davis) on Volumes 1 and 3, English tenor saxophonist Kathy Stobart's superb reading of I Can't Get Started on Volume 3, German pianist Jutta Hipp's wonderfully free-flowing All the Things You Are (Volume 3), and the characteristically fine and unique performances by Mary Lou Williams on all three volumes.

I have reserved mention of Volume 2, "Pianists," for last, because it is, overall, the best album. That may well be because pianists were the most widely accepted of the female instrumentalists, and therefore also the ones who enjoyed the longest careers. This album features sixteen of them, ranging from Lovie Austin (recorded in 1924) to Toshiko Akiyoshi (recorded in 1961) and including only three performers-Una Mae Carlisle, Mary Lou Williams, and Jutta Hipp—heard on the other two volumes. It's an interesting collection which mirrors the history of jazz from barrelhouse and the New Orleans style to bop and beyond, and it demonstrates in a most graphic and enjoyable way that women have had a place in jazz from the very beginning. How sad for all of us that they were denied their rightful equal status. Let's hope that the release of this series will encourage more young women to pursue a musical career in jazzand, for that matter, in jazz criticism.

INALLY, I should mention that the technical quality obtained by engineer Jerry Valburn is generally excellent. But I wish more care had gone into the packaging; the covers are dreary, recording data are incomplete and in many instances inaccurate, names are misspelled, and the labels give only song titles. This is an important release, and it deserves better. —*Chris Albertson* 

WOMEN IN JAZZ: Volume 1, All Women Groups. The International Sweethearts of Rhythm: Digging Dyke; Vi Vigor; Don't Get It Twisted. Jean Starr: Sergeant on a Furlough; I Surrender Dear; Moonlight on Turhan Bay; Seven Riffs with the Right Woman. Mary Lou Williams: Timmie Time; Humoresque; Boogie Misterioso. Norma Carson: Cat Meets Chick; The Man I Love. Beryl Booker: Don't Blame Me; Low Ceiling. Edna Williams: A Woman's Place Is in the Groove; Body and Soul. STASH ® ST 111 \$6.98.

WOMEN IN JAZZ: Volume 2, Pianists. Arizona Dranes: Crucifixion. Vera Guilaroff: A Cup of Coffee. Lovie Austin: Traveling Blues. Lil Hardin Armstrong: Put 'Em Down Blues. Mary Lou Williams: The Rocks. Una Mae Carlisle: Don't Try Your Jive on Me. Cleo Brown: Mama Don't Want No Peas an' Rice an' Coconut Oil. Hadda Brooks: Chopin Nocturne. Beryl Booker: Love Is the Thing. Rose Murphy: My Blue Heaven. Nellie Lutcher: Hurry On Down. Dorothy Donegan: St. Louis Blues. Barbara Carroll: Morocco. Hazel Scott: 'Round Midnight. Jutta Hipp: Indian Summer. Toshiko Akiyoshi: Tempus Fugit. STASH ® ST 112 \$6.98.

WOMEN IN JAZZ: Volume 3, Swingtime to Modern. Mills Cavalcade Orchestra: Lovely Liza Lee; Rhythm Lullaby. Mike Riley and His Round and Round Boys: You're Giving Me the Run-Around. Una Mae Carlisle and Her Jam Band: I Would Do 'Most Anything for You. Lulle Ellboj's Orchestra, featuring Valaida Snow: Caravan; My Heart Belongs to Daddy. The International Sweethearts of Rhythm: Jump Children; Slightly Frantic. The Hip Chicks: Popsie; Striptease. Woody Herman Orchestra, with Marjorie Hyams: Northwest Passage. Kathy Stobart: I Can't Get Started. Hans Koller's New Jazz Stars, with Jutta Hipp: All the Things You Are. Beryl Booker: Squirrel. Terry Pollard: T & S. Vi Redd: That's All. STASH ® ST 113 \$6.98.



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# RECORDING OF SPECIAL MERIT

J. S. BACH: Italian Concerto (BWV 971); Prelude in A Minor (BWV 922); Chromatic Fantasy and Fugue (BWV 903); Fantasy and Fugue in A Minor (BWV 904). BACH/BUSONI: Chorale Preludes: Ich Ruf'zu Dir (BWV 639); Nun Komm' der Heiden Heiland (BWV 659). Alfred Brendel (piano). PHILIPS 9500 363 \$8.98.

Performance: Excellent Recording: Sensitive

J. S. BACH: English Suite No. 3, in G Minor (BWV 808); Capriccio on the Departure of His Beloved Brother (BWV 992); Toccata and Fugue in D Major (BWV 912); French Suite No. 5, in G Major (BWV 816). Wilhelm Kempff (piano). DEUTSCHE GRAMMOPHON 2530 723 \$8.98. © 3300 723 \$8.98.

## Performance: Romantic Recording. Fine

Alfred Brendel and Wilhelm Kempff both firmly believe that Bach can be performed as effectively on the piano as on the harpsichord, both are fine pianists, and both address their instruments with a true pianism that makes no attempt to imitate the harpsichord. They come from completely opposed traditions, however, and the results they produce are strikingly different.

Brendel, according to a provocative interview printed on the jacket, postponed until re-

# Explanation of symbols:

- $\mathbb{R}$  = reel-to-reel stereo tape
- (8) = eight-track stereo cartridge
- $\mathbf{\hat{C}}$  = stereo cassette
- $\Box$  = quadraphonic disc
- $\mathbf{R}$  = reel-to-reel quadraphonic tape
- **8** = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol  $\widehat{\mathbf{M}}$ 

The first listing is the one reviewed; other formats, if available, follow it.

cently playing Bach in public because he felt unable to free himself from the influence of his teacher Edwin Fischer and because he has been a keen observer of the development of the Bach style on the harpsichord. His observations have resulted in a style that features a crisp, vigorous touch, a vital rhythmic approach, and highly accurate ornamentation. If he begins ornaments on the principal note, as he does in the slow movement of the Italian Concerto, it is for a well thought-out reason, not because of ignorance. His interpretations are based on a sure grasp of musical structure, and he makes one aware of the important differences between solo and tutti passages and between expositions and episodes. But Brendel is still a colorist in the pianistic sense and very often brings to the music a dynamic dimension of which the harpsichord is incapable. In the A Minor Prelude, for example, there are about sixty-eight repetitions of one figure and then about 104 repetitions of another. Not even a harpsichordist playing an instrument with seven pedals can bring such repetition off successfully. Brendel, however, avails himself of pianistic crescendos and diminuendos and renders the passages hair-raising. Perhaps the best example of combining Baroque performance practice with planism is found in the arpeggiations of the Chromatic Fantasy. Again the surge of volume and imaginative figuration are telling. Nor is Brendel afraid of doublings and pedal; both are used discreetly and effectively

Wilhelm Kempff, on the other hand, plays Bach in the nineteenth-century tradition, a tradition ignorant of proper ornamentation and essential rhythmic alterations, and uses dynamics for their immediate effect rather than for structural clarification. In the allemande of the Fifth French Suite, short trills are played like inverted mordents: before the beat and on the principal note. Short appoggiaturas emasculate the harmonies of the saraband of this suite, and the lack of dotting in the same movement renders the melodic line limp. The concerto-like prelude of the G Minor English Suite is bland because there is no distinction made between solo and tutti. Although Kempff's tone is opulent, it doesn't have enough starch to articulate Bach's detailed, nervous lines. Only in the fugal gigues that conclude each of these works does Kempff offer some drive and excitement.

These two discs clearly demonstrate the problems confronting the pianist playing Bach today. Kempff shows us that nineteenth-century Romanticism simply will not work. Brendel reveals that profound study and discreet application of historical approaches can serve the pianist well, and he has, as a result, given us some of the finest Bach playing on discs today. S.L.

**BEETHOVEN:** Missa Solemnis in D Major, Op. 123. Lucia Popp (soprano); Yvonne Minton (contralto); Mallory Walker (tenor); Gwynne Howell (bass); Chicago Symphony Orchestra and Chorus, Sir Georg Solti cond. LONDON OSA 12111 two discs \$15.96.

#### Performance: Good to superb Recording: Sumptuous

Solti's reading of Beethoven's titanic Mass strikes me as occupying a middle ground between Bernstein's divine frenzy (Columbia M2S 619) and Jochum's intense devotion (Philips 6799 001). Except for what seems to be a slight lack of choral presence until the Sanctus, the London sonics are outstandingly fine: spacious in ambiance and extraordinarily rich and full-bodied in the orchestral department. The vocal soloists are well balanced with each other and with the orchestra as weli. Interpretively, Solti seems to me to be unusually restrained up through the Credo, exercising great care as to clarity of texture and nuance. Only with the onset of the Sanctus, and most especially in the Benedictus with its seraphic violin solo (exquisitely played by Victor Aitay), does the element of exaltation make itself really manifest in this performance. But it then persists through the shattering Agnus Dei right to the very end.

The women on Solti's team of vocal soloists are consistently fine throughout; Yvonne Minton's prayerful solo in the Agnus Dei is especially memorable. Bass Gwynne Howell is also in splendid, darksome form in his opening here. However, tenor Mallory Walker is distressingly unassertive in his "homo factus est" utterance at the close of the "Et incarnatus" section of the Credo. The chorus, trained and directed by Margaret Hillis, is just plain magnificent, the closing fugue of the Credo being a particular high point of its performance.

When it comes to picking the recorded performance of the Missa Solemnis from the presently available versions, I confess to being somewhat at a loss. The mono Toscanini remains a unique document. Bernstein's, like Toscanini's, is a "dare-all" affair with a special visceral excitement and fervor. Jochum's is probably the most representative of the great European tradition, and it boasts the Amsterdam Concertgebouw and a superb team of soloists. The Angel issues-Klemperer and Karajan early and late-also present realizations of unique distinction on a variety of levels. Sonically, I incline toward Jochum and Solti in that order. Musically, I would supplement these with Klemperer. Bernstein, or Toscanini. Or all three-an expensive proposition, but a pretty sure way of aurally and spiritually exploring every facet of Beethoven's unique sacred masterpiece. D.H.

# **BERKELEY:** Sonatina for Violin and Piano (see WALTON)

BRUCKNER: String Quintet in F Major; Intermezzo in D Minor. Vienna Philharmonic Quintet. LONDON STS 15400 \$3.98.

# Performance: *Echt* Viennese Recording: Warm

The F Major Quintet is Bruckner's only mature chamber-music work, but it has not benefited much until now from the Great Bruckner Revival. Although the composer's long symphonic lines and lyric architecture lend themselves very well to chamber music, the problem is that the work is difficult to play; for the premiere, Bruckner had to write a new, easier scherzo in order for the piece to be performed at all. Even the Vienna Philharmonic musicians of today do not completely master all the problems. There are some truly awkward places in this music, and in this recording the finale never does seem completely up to tempo. On the other hand, this is gorgeous, old-time string playing of just the right kind, and the superb adagio-one of those movements that cannot be called anything else but divine or sublime-is, quite simply, a wine-out

The Intermezzo in D Minor is that aforementioned substitute scherzo. It is placed, a little uncomfortably, at the beginning of side one, obviously to avoid a side break during the adagio. But it does not make good sense to listen to the compromise scherzo as a prelude to the beginning of the quintet, especially since the trio is the same in both versions. It could really have been omitted; there is certainly plenty of music here without it. Despite these problems, this performance will have lot of appeal for Bruckner lovers—especially those who like their Bruckner in the *echt* Viennese manner. *E.S.* 

DEBUSSY: La Mer; Prélude à l'Après-midi d'un Faune. RAVEL: Boléro. Berlin Philharmonic Orchestra, Herbert von Karajan cond. ANGEL □ S-37438 \$7.98, © 4XS-37438 \$7.98.

DEBUSSY: La Mer; Prélude à l'Après-midi d'un Faune; Rapsodie for Clarinet and Orchestra; Marche Écossaise. George Pieterson (clarinet, in *Rapsodie*); Concertgebouw Orchestra, Amsterdam, Bernard Haitink cond. PHILIPS 9500 359 \$8.98, © 7300 586 \$8.98.

## Performances: Karajan classical, Haitink impressionist Recordings: Both rich but clear

I didn't much care for Karajan's Debussy at first—too restrained, too classical, too dependent on big, laid-back lines and not enough on color and rhythmic fluidity. Haitink has the right languorous touch. The sonority—and a wonderful Concertgebouw sonority it is—oozes and wells up and flows. This is very beautiful and sensitive performing and recording, and most Debussy lovers will prefer it (with the little-played *Rapsodie* and the early *Marche* as a couple of minor extras).

Haitink's Debussy is far from mushy, but

he likes to keep some of the mystery, some of the mist that rises up off the Debussyan sea. Karajan, on the other hand, is a classicist who approaches Debussy as if he were Schubert. La Mer, with its symphonic scope, can probably take this treatment as well as any work of Debussy, and Karajan succeeds in building some of the most tremendous climaxes I have ever heard in this music. But the work that really responds to this approach is Boléro. The starting point here is so laid-back and the build-up so tremendous that, among a zillion recordings, this must qualify as very nearly the most exciting. As for Karajan's Debussy, I think it's entirely a question of taste. I got into it after a while, but it certainly cannot be considered the most idiomatic musical impressionism on records. E.S.

DVOŘÁK: Cello Concerto in B Minor, Op. 104; Othello Overture, Op. 93. Mstislav Ros-



# *Two Striking New Works by Corigliano*

JOHN CORIGLIANO, now forty, is the scion of a musical family, his father having been concertmaster of the New York Philharmonic for many years and his mother a pianist. Since finishing his studies at Columbia College and the Manhattan School of Music, Corigliano has been composing ambitious choral works and orchestral pieces which have won some important awards, such as the first prize he got in the Spoleto Festival Chamber Music Competition for his Sonata for Violin and Piano.

In a talk with the New York Philharmonic's program editor Philip Ramey, quoted in the liner notes accompanying RCA's new recording of two of his works, Corigliano tells about

his five-movement Oboe Concerto in some detail. He describes the opening movement in which the oboe "tunes the orchestra," the emphasis on the instrument's forceful lower register, the slow song that follows the bustling first section, the "high velocity, polyrhythmic episode for oboe and percussion, with harp and piano" in the scherzo, the coloratura quality of the solo work in the fourth movement, and the unusual finale inspired by the rheita, a Moroccan reed instrument. Written in 1975, the concerto is an intriguing, complex piece of work, brilliant in its exploitation of the solo instrument and daring-though seldom dissonant-in its adroit use of immense orchestral forces, in its strong rhythms, and in its surprising turns of phrase. The performance by the American Symphony Orchestra under Kazuyoshi Akiyama, with Bert Lucarelli as soloist, is a stunning one.

VEN more fascinating is *Poem in October*, a setting of Dylan Thomas' modern classic about a walk the poet took on his thirtieth birthday through the Welsh town where he grew up. Thomas' lines are so musical in themselves that it is a pleasant surprise to hear how successfully Corigliano has been able to convert them into song, while the accompaniment for string quartet, harpsichord, and wind instruments is beautifully realized by the ensemble with Maurice Peress conducting. With so fine a tenor as Robert White to sing the lines and so splendidly shaded an instrumental background to convey the shifting weather of the poem, this is an excellent interpretation of a striking contemporary work. Poem in October is actually part of an hour-long trilogy, completed in 1970, based on three Dylan Thomas poems. Too bad the whole trilogy was not recorded. Let's hope that some day it will be. -Paul Kresh

JOHN CORIGLIANO: Oboe Concerto. Bert Lucarelli (oboe); American Symphony Orchestra, Kazuyoshi Akiyama cond. Poem in October. Robert White (tenor); Maurice Peress (harpsichord); Thomas Nyfenger (flute); Bert Lucarelli (oboe); Joseph Rabbai (clarinet); American String Quartet; Maurice Peress cond. RCA ARL1-2534 \$7.98.

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CIRCLE NO. 8 ON READER SERVICE CARD

tropovich (cello); Czech Philharmonic Orchestra, Vaclav Talich cond. HERITAGE HCN 8004 \$7.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: Youthful Recording: Good enough

DVOŘÁK: Cello Concerto in B Minor, Op. 104. SAINT-SAËNS: Cello Concerto No. 1, in A Minor, Op. 33. Mstislav Rostropovich (cello); London Philharmonic Orchestra, Carlo Maria Giulini cond. ANGEL  $\Box$  S-37457 \$7.98.

Performance: Mature Recording: Up to date

The cello concerto literature contains only one repertoire item, and it is the fate of great cellists to have to record the Dvořák over and over again. Here are Rostropovich's newest and oldest. The 1952 Czech version is said to have introduced the young cellist to the West. It is a youthful performance, vigorous, even brash, full of zest and gusto. The new recording is, as it should be, much warmer, more mellow, a little draggy in the tuttis but rich and passionate in the solos. I don't see any way to cast a simple vote; the first two movements probably have more depth and warmth in the new recording, but the old finale really catches the spirit.

The Angel release also includes a fine performance of a mediocre work: the Saint-Saëns concerto. The Czech recording adds a work of considerable interest: the Othello Overture—the last and least-known of Dvořák's symphonic trilogy that includes Carnival and In Nature's Realm. It is a striking work of great originality and dramatic power. Both exciting performances come through the 1951 mono sound very well. E.S.

# RECORDING OF SPECIAL MERIT

ELGAR: Sursum Corda, Op. 11; Sospiri, Op. 70; Beau Brummel, Minuet; The Spanish Lady, Burlesco; Adieu; The Starlight Express, Waltz. VAUGHAN WILLIAMS: The Poisoned Kiss, Overture; Two Hymn-tune Preludes; The Running Set; Sea Songs. Bournemouth Sinfonietta, George Hurst cond. CHALFONT C77.005 \$7.98 (from Chalfont Records, P.O. Box 11101, Green Lantern Station, Montgomery, Ala. 36111).

Performance: Idiomatic Recording: Excellent

Here is a package of real novelties: three of the four Vaughan Williams titles (all but Sea Songs) appear in recorded form for the first time, and of the Elgar pieces only Sospiri is likely to be familiar to many listeners. Organist Michael Austin joins the trumpets, trombones, horns, timpani, and strings in Sursum Corda, an expansive and rather solemn piece written in 1894 to welcome the Duke of York (later King George V) to Worcester. The Adieu is a sentimental little piece, in a vein rather like that of Sospiri, and George Hurst is even more indulgent with it than Barbirolli was (but, like Sir John, he successfully avoids mawkishness). The remaining three Elgar items are lighter and more animated, and the waltz provides a really charming ending for the side.

The Vaughan Williams side is altogether more consistently attractive, and the overture to *The Poisoned Kiss* makes one curious about an opera that contains such agreeable

tunes. The hymn-tune preludes for small orchestra (Eventide and Dominus Regit Me) were composed between the Fourth and Fifth Symphonies and might be said to anticipate the latter. In The Running Set, a brilliant little fantasy on four dance tunes, and the Sea Songs, a march based on three naval songs and originally composed for band, we approach the familiar world of the English Folk Song Suite, but the grander, more colorful orchestration sets these little gems just as near the world of The Wasps and Old King Cole. Hurst's obviously idiomatic feeling for the material, the fine playing he draws from the Bournemouth Sinfonietta, and the outstanding sound (originated, I believe, by Polydor) combine to present everything on the record at its best, and the Vaughan Williams side is just about irresistible. R.F.

# RECORDING OF SPECIAL MERIT

ELGAR: Violin Concerto in B Minor, Op. 61. Kyung-Wha Chung (violin); London Philharmonic Orchestra, Sir Georg Solti cond. LON-DON CS 7064 \$7.98.

Performance: **Topnotch** Recording: **Very good** 

This is a very different-but equally validtreatment of Elgar's great violin concerto from the gloriously romantic and soulful one offered by Zukerman and Barenboim on Columbia. The differences lie in the essential characters of the performances in terms of tonal quality and pulse. There is more impetuosity and muscle in Solti's handling of the orchestral tuttis than in Barenboim's, and, where Zukerman's tonal warmth carries all before it, it is purity and brilliance of tone, in combination with sheer agility, that make Kyung-Wha Chung's realization special. Both soloists excel in the slow movement, one of the summits of Elgar's lyrical writing, and Miss Chung's blistering finale is a violinistic tour de force. London's recording is right up to standard, with the orchestra miked a shade more closely than in the Zukerman/Barenboim collaboration. I confess my continued partiality to the expansive romantic ardor of Zukerman and Barenboim. I think this music can take it-and, for that matter, deserves it. But anybody who wants a little more muscle and a touch of emotional reticence should find the Chung/Solti disc just right. DH.

ENESCO: Roumanian Rhapsodies Nos. 1 and 2, Op. 11. L'Orchestre des Concerts Colonne, Georges Enesco cond. Dixtuor for Winds in D Major, Op. 14. Wind Soloists of the Orchestre National de France, Georges Enesco cond. VARÈSE SARABANDE <sup>(1)</sup> VC 81042 \$7.98.

Performance: Uniquely authoritative Recording: Passable

I am not the only one who has hoped for years that someone would get hold of the old Remington tapes and reissue such gems from the catalog of that pioneering budget label as Enesco's recordings of his own music, Manuel Rosenthal's RIAS Symphony Orchestra performances of *Gaîté Parisienne* (much more animated than his Monte Carlo performance on Angel S-37209) and the Offenbachiana he created especially for recording, and Otto Matzerath's superb Schumann Spring Symphony. Not too long ago Vox picked up a few items, the most interesting being Villa-Lobos' recording, as conductor of the RIAS Orches-

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tra, of his Chôros No. 6, a fascinating piece which should be heard in our concert halls (Turnabout <sup>®</sup> THS-65002); this is about to be re-reissued on Varèse Sarabande, along with several Remington-derived items recorded in genuine stereo. In the meantime, the new label has come up with what was on the other side of the Remington Villa-Lobos, the two Enesco Rhapsodies of Op. 11, and what remains so far the only recording offered in this country of the *Dixtuor*, a most engaging piece, if somewhat less distinctive than the Rhapsodies or the Op. 7 String Octet which Enesco also recorded for Remington.

These Enesco recordings were made in 1951 or earlier (several years before the aforementioned RIAS material), and they were hardly sonic showpieces even by the standards that prevailed then. But it is good to have such works as the Roumanian Rhapsodies in Enesco's own performances (he was by no means just a "composer-conductor," but as distinguished on the podium as with his violin-and no mean pianist, either), which are as straightforward, ungimmicky, and eminently musical as one might imagine, and this reissue is a reminder that the Dixtuor really deserves a better fate than it has met with so far. The new disc is well worth investigating, but old-timers who have the original Remington pressings are likely to prefer them for their greater sense of immediacy, despite the quieter surfaces and smoother characteristics achieved in Varèse Sarabande's painstaking processing. Although labeled "mono," the new edition of the Rhapsodies (not the Dixtuor) appears to have been rechanneled for phony stereo: Tom Null, who supervised the reissue, advises that the original mono tapes had been lost and his team had to work from a Remington rechanneled tape, trying to recapture the original mono character as well as possible. R.F.

FISCHER: Die Friedensmesse. Fischer Choir; Hans Bertram Symphony Orchestra, Gotthilf Fischer cond. DEUTSCHE GRAMMOPHON 2584 022 \$8.98, © 3334 022 \$8.98.

Performance: Unexciting Recording: Very good

Twenty years ago, in the town of Wurttenburg in West Germany, a gentleman named Gotthilf Fischer decided to round up everybody in the neighborhood who could carry a tune and combine them (including the members of thirteen different choral societies) into one big and (presumably) happy choir. After Fischer and his choir visited the Vatican in 1976, where they sang for the Pope, their director determined to go home to Wurttenburg and write a Mass inspired by his visit. The result was this Mass for Peace (Friedensmesse), which is dedicated to "President Jimmy Carter, in celebration of his courageous and devoted efforts for the cause of peace throughout the world." A well-meaning but dismal work it is. Beginning with an ineptly worded prayer for freedom and peace-sung, for some reason, in English by the German members of the Fischer Choir-the work continues with the Latin text of the Mass for some forty minutes of hollow choral rhetoric. This empty exercise culminates in a final praver. again in English, during which the Creator is asked to save the world from "pain and evil" in a way that must surely try His patience.

As for the performance, since a thousand voices sound in stereo like no more than fifty

ingeniously miked, the results are scarcely more exciting than the simplistic music Fischer's forces are compelled to sing. The melodies are amazingly elementary and must have been easy enough to learn even for the most backward amateur in the group. The Hans Bertram Symphony Orchestra (named, apparently, in honor of the producer of the album) pounds away for all the world as though it were engaged in a performance of the Beethoven Missa Solemnis itself. P.K.

GILBERT AND SULLIVAN: The Gondoliers, or The King of Barataria. SULLIVAN: Marmion Overture. John Reed (baritone), Duke of Plaza-Toro; Geoffrey Shovelton (tenor), Luiz; Kenneth Sandford (baritone), Don Alhambra del Bolero; Meston Reid (tenor), Marco Palmieri; Michael Rayner (baritone), Giuseppe Palmieri; Lyndsie Holland (contralto), Duchess of Plaza-Toro; Julia Goss (soprano), Casilda; Barbara Lilley (soprano), Gianetta; Jane Metcalfe (mezzo-soprano), Tessa; Beti Lloyd-Jones (contralto), Inez. D'Oyly Carte Opera Company; Royal Philharmonic Orchestra, Royston Nash cond. LONDON OSA 12110 two discs \$15.96, © 5 12110 \$15.96.

# Performance: Airy and idiomatic Recording: Excellent

The Gondoliers has been recorded a number of times, most spectacularly about ten years ago by London with the D'Oyly Carte Opera Company and the New Symphony Orchestra

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CIRCLE NO. 85 ON READER SERVICE CARD



# Pettersson's "Vox Humana" Song Cycle

**S**INCE 1968, Allan Pettersson, who had been virtually unknown even in his native Sweden, has seen six of his thirteen symphonies recorded, together with a number of smaller-scale works (most notably the *Barefoot Songs*, HNH 4003/4). It was Antal Dorati's recording of his anguished and haunting Seventh Symphony (London CS 6740) that made him a figure of international interest, but as we become more familiar with Pettersson's music it is clear that there is more to him than harrowing post-Bergian eruptions. The *Vox Humana* song cycle, now available on a Swedish Bis recording, is a major example of another side of Pettersson.

The texts for the eighteen-part cycle for soloists, chorus, and string orchestra are translations into Swedish from a variety of Latin-American sources, ranging from poems by unknown Amerindians of the distant past and by Cuban proletarian poets to works of such eminent figures as César Vallejo of Peru, Manuel Bandeira of Brazil, and the late Pablo Neruda of Chile. One and all, the poems deal with the sufferings of the poor and oppressed, and the last, by Neruda, speaks of hope for a better day to come, when the creative artist will take his proper place as a man among brother farmers and workers in a just society. Hardly months before embarking on Vox Humana, Pettersson had completed his fiftyfour-minute Symphony No. 12 (Swedish Caprice CAP 1127), whose texts are Neruda's Los Muertos de la Plaza (The Dead on the Square) and eight other poems written in memory of those killed in a 1946 workers' revolt; it is a Dantean choral-orchestral outpouring of grief-laden wrath. In sharp contrast, the treatment of the no less militant Vox Humana poems is startlingly restrained.

The instrumental texture of Vox Humana is that of a resourcefully scored string orchestra, with the choral elements treated both as transmitters of the texts and as part of the overall musical fabric. In more than half of the sections the main burden of the text is carried by the solo voices. There is little that is overtly "expressionistic" in the settings and little of the kind of word-painting that one encounters in certain of the Barefoot Songs. Chiefly, one is aware of the continuous flow and momentum of the writing, which is in a chromatic, almost neo-Palestrinian vein. There are a few moments of abrupt drama, as in the Amerindian Sentence for a Traitor, and there are wonderfully touching passages, such as the setting for tenor and chorus of Bandeira's The Final Poem and the one for baritone and low strings of Vallejo's moving A Man Goes Past with a Loaf of Bread on His Shoulder. Unlike the immediately communicative Barefoot Songs and Symphony No. 7, Vox Humana requires numerous hearings, Swedish/English texts in hand, before one can fully integrate in one's own mind the poems and their settings.

As for the performance, the quartet of soloists does beautiful work, and the Swedish Radio Chorus and Orchestra members play devotedly under Stig Westerberg's direction. I cannot, however, help feeling that the performance would have more impact if the recording had been produced with greater attention to dramatic effect. The soloists are, quite properly, in the acoustic foreground, but Pettersson's intricately interwoven choral textures become lost or blurred because insufficient "presence" is granted to the chorus as a whole and because the possibilities of stereo directionality are not used to point up the numerous elements of interplay and dialogue among its various sections. Vox Humana deserves a better recording job than this, which is one of the very few less than satisfactory ones I have heard from the Bis label.

–David Hall

PETTERSSON: Vox Humana. Marianne Mellnäs (soprano); Margot Rödin (contralto); Sven-Erik Alexandersson (tenor); Erland Hagegård (baritone); Swedish Radio Chorus and Symphony Orchestra, Stig Westerberg cond. Bts LP-55 \$8.98 (from Qualiton Records, 65-37 Austin Street, Rego Park, N.Y. 11374). of London conducted by Isidore Godfrey. That three-record set, complete with dialogue and offering the delectable bonus of *Cox and Box*, is still available on London OSA 1323. Just why it has been decided to record a second version of *The Gondoliers* with dialogue when we still have none of *The Mikado* is a mystery. Never mind, though, the album is here, and comparisons are inevitable.

A number of singers have roles in both versions, among them John Reed, who has grown from skittishness to a certain comic stature in the role of the Duke of Plaza-Toro, and Kenneth Sandford, who is again on hand as the drolly implacable Grand Inquisitor. Lyndsie Holland is a slightly fiercer spouse to the Duke than was Gillian Knight; Thomas Round and Alan Styler are more robust, though rather less charming, as the gondolieri Marco and Giuseppe, and Geoffrey Shovelton proves a slightly less sappy Luiz than did Jeffrey Skitch. As for the contadini who marry the duo of sunny gondoliers, Barbara Lilley as Gianetta and Jane Metcalfe as Tessa sing the lovely ballads Sullivan provided for them with all their hearts, but they are never as winning as Mary Sansom and Joyce Wright in the same parts on the older recording. Then there is the Casilda of Julia Goss, who performs her comic songs with the "r's" emerging as 'w's'' (in the manner of Bawbwa Wawa on Saturday Night Live); the mannerism is irritating, and in her serious songs the "r's" are conventional, rendering the whole approach ridiculous. Otherwise, she's appealing enough, delivering her coquettish lines of dialogue with vigor. Indeed, all the dialogue is recorded on a higher level and is in general more animated than on the older recording.

The Royal Philharmonic really does right by Sullivan's score, delivering every nuance intact, and the chorus sings with resounding brilliance. On the other hand, the sustained musical opening has markedly less lilt and Latin abandon than in the older version, and I missed conductor Godfrey's addition of the Dance a Cachucha to round out the scanty overture. But Royston Nash's performance increases in excellence as it proceeds, and by the time the plot complications were cleared up and the gondoliers and their wives safely back in Venice, I was quite won over. London has squeezed the whole production into the space of two discs, even finding room for the composer's comfortably upholstered overture to Marmion, so the sides are long-the last one runs better than thirty-five minutes-and the sound a bit pinched as a result (the cassette version is free of this defect.) Which to buy? If the older recording is already in your collection no need to add another: if not, the bright playing of the Royal Philharmonic might just tip the scales in favor of this new P.K.release.

HANSON: For the First Time. Eastmañ Philharmonia Orchestra, Howard Hanson cond. HIVELY: Tres Himnos. Eastman-Rochester Symphony Orchestra, Howard Hanson cond. ERA 1015 \$5.98.

Performance: Impeccable Recording: Excellent

One of the pleasures of life these days is being able to replace old, beat-up copies of records you love with reissues of the same material, the sound all cleaned up and the ticks and clicks only an ugly memory. A label called (Continued on page 154)

"more to him than harrowing post-Bergian eruptions"

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ERA (for Eastman-Rochester Archives) has been performing this service for the old Mercury Records releases of American music, most of it performed by the Eastman-Rochester Symphony Orchestra under Howard Hanson, from the 1950's, when Mercury was way ahead of most other record companies in obtaining excellent sound (some of the releases were recorded in stereo before stereo records were even on the market). Hanson turned in emphatic, vigorous performances, usually of works by composers who remained loyal to conservative principles of tonality, and the series contained some winning music.

At the same time, Hanson managed to commit to discs quite a few of his own works, not all of which would seem to merit immortality. For the First Time is one that does not. It is a suite of rather impressionistic pieces (with such titles as Bells, Deserted House, Eccentric Clock, Mist, and Dreams) that is long on charm and colorful orchestration in a Sibelian vein, but rather short on memorable content. (There was a pedagogical intent to this work, and the album is subtitled "The Composer and His Orchestra, Volume III," but the nature of the intent is not made very clear in this reissue.)

The *Tres Himnos* by Wells Hively is something else again, and I have long cherished my copy of it. This series of meditations in a Mexican idiom, culminating with a nocturne intended to evoke the local color of a street fair, fireworks display, and religious ceremony, is wonderfully atmospheric but at the same time most sturdily constructed. Both works receive impeccable performances, and the sound holds up uncannily well. *P.K.* 

HIVELY: Tres Himnos (see HANSON)

JOSEPHS: Chacony for Violin and Piano, Op. 38 (see WALTON)

# RECORDING OF SPECIAL MERIT

KODÁLY: Sixteen Songs, Op. 1; Four Songs; Belated Melodies, Op. 6; Five Songs, Op. 9; Himfy Song; Epitaphium Joannis Hunyadi. Éva Andor, Ilona Todoky, Sylvia Sass (sopranos); Boldizsár Keönch, Attila Fülöp (tenors); István Gáti, György Melis, Sándor Sólyom Nagy (baritones); Kolos Kováts, József Gregor (basses); Lóránt Szücs (piano). HUNGAROTON SLPX 11766/7 two discs \$15.96 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: Very good Recording: Very good

Zoltán Kodály was a master of vocal writing, but his output of solo songs was not extensive and it was largely limited to his early years. After 1925, following his highly successful stage works *Háry János* and *The Spinning Room*, he turned to choral writing.

This two-record set, enlisting the services of contemporary Hungary's leading singers, contains nearly all of Kodály's songs for solo voice and piano. They start with Op. 1, sixteen settings of folk songs bound into a sequence that forms more of a musical than a poetic cycle. The simple, direct settings were essential to the foundation of the composer's style, for the music is shaped by the rhythm of the language. Éva Andor sings these songs movingly and sensitively. Debussy's influence, already noticeable in some of the earliest songs, is clearly perceived in Nausikaa, one of the Four Songs (without opus number). These, and indeed nearly all the songs in this collection, are in a plaintive vein, dealing with sorrowful love, partings, and the fleeting pleasures of life. One distinct exception is *Farewell to Carnival*, a suitably lighthearted treatment of a playful poem. This is one of the *Belated Melodies*, so named because the texts are eighteenth-century Hungarian poems for which Hungarian composers of the pre-Bartók/Kodály era, firmly rooted in their German schooling, simply could not find the right settings.

Ferenc Bónis observes in his detailed annotations that according to Kodály "music written to Hungarian texts is virtually impossible to translate into another European language, and the melodic line flowing from such a text will sound alien to other Europeans." While I find Kodály's songs never less than interesting and frequently haunting, some may indeed sound "alien" to ears attuned to German, Italian, and French song literature-though certainly not to those who appreciate Moussorgsky, Dvořák, or Janáček. Despite the many voices involved, the singing here is almost uniformly excellent, and so is the work of the accompanist, who must play everything from austere chords to passages of Lisztian brilliance. G.J.

MAHLER: Symphony No. 1, in D Major. Royal Philharmonic Orchestra, Carlos Paita cond. LONDON SPC 21167 \$7.98, © SPC 5 21167 \$7.95.

Performance: Erratic Recording: Very spacious

Carlos Paita's performance of the Mahler First Symphony is not for the purists. While there is fine poetic feeling in his spacious approach to the opening pages, the main body of the first movement gets a freewheeling, even fussy treatment that fails to achieve coherence for its somewhat sprawling structure. The scherzo is brisk and breezy in the main sections, but there is too much gear shifting in the trio. By and large, the ironic Funeral March comes off best here. The finale, like the first movement, looses both momentum and coherence through Paita's extreme tempo contrasts. The Royal Philharmonic Orchestra plays most responsively, with fine solo work in the woodwind department. The Phase-4 recording features the element of space rather than the usual textural-analytic microphone setup, and there is an unusually deep acoustic perspective. Bass presence is impressive and full-bodied without being exaggerated. All told, this is a disc more for sound buffs than for dedicated Mahlerites. D.H.

# RECORDING OF SPECIAL MERIT

MENDELSSOHN: Songs Without Words: Op. 19, Nos. 1, 2, 4, 6; Op. 30, Nos. 1, 3, 6; Op. 38, No. 6; Op. 53, No. 4; Op. 62, Nos. 1, 3, 6; Op. 67, No. 4, John O'Conor (piano). DENON/ PCM OX-7121-ND \$14 (from selected audio dealers).

# Performance: In the classic manner Recording: Breathtaking

If I have seemed to downgrade direct-to-disc recording as the wave of the future in favor of digital pulse-code-modulation recording, it has been because of what I have heard from a couple of 1972 and 1974 Japanese Denon discs (Continued on page 158)

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System.

**E**RVIN NYIREGYHÁZI is a pianist who will permanently inspire controversy, but there is at least one quality of the man that, whatever one's critical opinions, cannot be denied: his uniqueness. There is no one else in the world today who plays the piano this way.

Was there ever anyone who played this way? Verifiable evidence is lacking, but descriptions that have survived of the playing of such as Liszt and Anton Rubinstein would lead us to think that there was. For those descriptions, instead of offering us cold and clear facts about dynamics, phrasing, rubato, and liberties taken, dwell on poetic metaphors and psychological states, and are couched in adjectival superlatives-the very sort of thing the mind brings forth when confronted with the playing of Nyiregyházi. Such nineteenthcentury critical conceits need not be called upon to describe any other living pianist. But that is one of the odd things about Nyiregyházi: you listen to him and you know instinctively that there is something more than piano playing at stake here, something in the playing itself that goes beyond playing. It would be quite as noticeable even had Columbia's justreleased two-disc set of Nyiregyházi performances come to us anonymously from parts unknown

I could not put a name to this quality. Part of it is a sense of immediate and direct emotional communication. There is no question that Nyiregyházi makes affecting music out of a lot of what normally would be considered rather rarefied material. Part of it also is the sheer sound of the piano as he plays it, for no one else makes it sound this way. Part of it is a sense of the past brought to life again. And part of it-for Nyiregyházi himself, probably the major part-is the expression of an intense personality: his. At their best, his performances are shatteringly powerful communications on planes both beneath and above the commonly expected and admired ones, at once undercutting the intellectual impulse and sublimating it.

o depart, if only temporarily, from abstractions, the cold and clear facts are these: however he has arrived at it or maintains it, Nyiregyházi has the true virtuoso technique, which is to say that what works for him does so with the greatest flair and fluency, but when the fingers fail, entire passages are swept onto the floor. His technique is at this time assuredly imperfect (he is in his seventysixth year of a hard life), for these records, which are completely unedited and uncorrected, contain many missed notes. One can say only that he gets most of the notes most of the time. But Nyiregyházi almost always fails (when he fails) in the attempt. The few times he backs away from a challenge (as he does, for example, in the double-octave accelerando in the Polnisch) are so few that they call undue attention to themselves.

His dynamic range, especially on the high end, is unprecedented. Next to him, Horowitz sounds like he is playing a toy piano. There is such a sense of *mass* present in his fortissimos that it belies any volume setting on the amplifier (and I have been categorically assured by the producers that the only monitoring of volume in the recording sessions has been downward—when, despite pretesting, the meters were being pinned to the top of their scales). So far as tempos are concerned, Nyiregyházi invariably opts for the slow ones, and, in fact, most of what he plays, regardless of the speed of individual figurations, is slow music. His rubato goes far beyond the bounds of what we might consider good or appropriate taste today, but he has an almost unerring sense of which notes are there to perform



The Return of Nyiregyházi

LISZT: Hungarian Rhapsody No. 3; Mosonyi's Funeral Procession; Nuages Gris; Abendglocken and Polnisch (from Weihnachtsbaum); Miserere after Palestrina (from Harmonies Poétiques et Religieuses); Aux Cyprès de la Villa d'Este (from Années de Pèlerinage, Troisième Année). LISZT/NYIREGYHÁZI: Hamlet; March of the Three Holy Kings (from Christus). Ervin Nyiregyházi (piano). COLUMBIA M2 34598 two discs \$15.98.

what functions, and his performances "work" in a natural if idiosyncratic way that is light years beyond the most carefully thought-out intellectual approach to the written score.

Finally, Nyiregyházi habitually recomposes the music in performance, an action expressive of a relationship between score and performer that is all but unknown (and all but high treason) today. He repeats sections, adds ornaments, changes accents, reverses dynamic and tempo indications, combines separate pieces, transcribes works clearly meant for other forces, and, in particular (and in great profusion) adds octaves at the bottom of the keyboard to left-hand passages to produce his thunderous sound. Yet, strangely, he never seems to be calling attention to himself as pianist when he does it, but is, rather, reinterpreting the composer's original vision. It is probably a measure of just how close psychologically Nyíregyházi's vision is to Liszt's that this recomposition works so well so often. Applied to some other composers it could be disastrous.

Now, the foregoing comments, both laudatory and critical, may be objectively true and even verifiable, but, as Nyiregyházi himself might point out, they do not tell the whole story; perhaps they do not even touch the real story. The matter of recomposition is central to the man, for his whole view of music is at odds with our conventional compartmentalization of composer and performer, with the score as scripture to be interpreted only for the composer's intentions (or, on the other hand, to be used as a mere vehicle for the performer's virtuosic prowess). Nyiregyházi's amalgam of the composer's "vision" and his own personality is neither of these. He has said words to the effect that he would welcome appreciation of himself as a man far more than as a pianist (remember Goethe's young Werther lamenting that he was admired for his mind whereas it was his heart that was truly great), for the piano is, for him, only a means of expressing that personality. And so he seems to be asking us to take him as a whole, wrong notes (warts) and all, for the power and the nobility (that is a big word for him, as it was for Beethoven) of his personality. It poses problems that are not easily solved, but some are certain to take him that way and will have their lives changed in the bargain. He could easily become the classical cult figure of the decade.

OR those of us not prone to cults, Nyiregyházi remains an uneven but fascinating and, at times, colossal musical figure. His previously released record (Desmar/International Piano Archives 111) contained unbelievable performances, taken from a concert, of Liszt's two Légendes. Future Columbia releases, some of which I have heard on tape, will include almost mystical revelations of such things as Liszt's Unstern plus works of Grieg and Tchaikovsky-and much, much more Liszt. There is a great deal to be impressed with in this first two-record set. Perhaps the greatest playing comes in about the first three-quarters of Nyiregyházi's own transcription of Hamlet-which falls apart in the final pages, though whether the fault is Liszt's, Nyiregyházi's, or Hamlet's is not all that easy to say. The Hungarian Rhapsody is awesome, as is the rarely heard Mosonyi's Funeral Procession. But there are great moments everywhere, and the recording seems really to capture the man's incredible sonorities.

Although the repertoire is for the most part rare, and almost everywhere fascinating, one does not buy a set like this for the pieces it contains. One buys it for the experience of a musical mind that some will declare a fraud and others will find an *Übermensch*, but which, however frustrating in its lapses from the ideal, remains altogether unique in its expression. —James Goodfriend

# NON, THE SUM OF THE PARTS, INSTEAD OF JUST SOME OF THE PARTS.

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produced with the PCM method that I have had around for almost a year. The record under review here is a 1977 example produced with substantially improved PCM equipment, and I can only say that sonically it is breathtaking! It is so free of background noise, from either the tape or the pressing, that any noise (such as turntable rumble) introduced by the playback equipment is immediately audible. These Mendelssohn performances by thirtyyear-old John O'Conor are recorded with such total clarity that comparing them with most other recordings is like comparing bracing mountain air with city smog.

If Daniel Barenboim's three-disc Deutsche Grammophon recording of the complete Songs Without Words sets the interpretive standard, this baker's dozen by O'Conor ranks very respectably. The classic rhythmic precision associated with Mendelssohn's own playing is dominant here, though there is also judicious use of rubato. The two big favorites of the set, the Spring Song and the Spinning Song, are included, as well as the two lovely gondola pieces from Opp. 19 and 30. And Mahler buffs may be startled to hear in Op. 62, No. 3, the stark theme that, as a fanfare, opens the later master's Symphony No. 5.

With all due respect to the startling clarity of the piano reproduction here, a bit more room coloration might have added tonal warmth (the best of Connoisseur Society's U.S. recordings of Ivan Moravec, Antonio Barbosa, and Morton Estrin are good examples of such atmospheric piano reproduction). Nonetheless, this Denon disc is another milestone on the road toward perfection in recording one of the most difficult of instruments to reproduce faithfully. D.H.

## RECORDING OF SPECIAL MERIT

MENDELSSOHN: Trio No. 1, in D Minor, Op. 49. SMETANA: Trio in G Minor, Op. 15. Trio Pro Arte. B1s LP-97 \$8.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: Superb Recording: Gorgeous

This is one of the most beautiful chambermusic recordings to come along in some time, even in a year in which there have been more than a few notable releases in that category. The Trio Pro Arte is a Copenhagen ensemble made up of pianist Elisabeth Westenholz, Czech-born violinist Milan Vitek, and Pierre René Honnens, who is the cellist of the Royal Danish Orchestra. The two string players have had opportunities to play together in the orchestra for some time (Vitek is its concertmaster); how long they have performed chamber music with Westenholtz, I don't know, but the two performances recorded here suggest a long, well-seasoned relationship based on mutuality of approach.

Both performances are expansive rather than supercharged, and it is an expansiveness in terms of intimacy rather than inflated gestures. The slow movement of the Mendelssohn, in particular, is breathtaking in its illumination of both the "con moto" and "tranquillo" of its heading. Some listeners, accustomed to regarding Mendelssohn as merely gentlemanly, may be astonished to discover how much depth there is in this music after all, especially as realized here in purely Mendelssohnian terms, without assuming the mask of Beethoven or Schubert. The Smetana trio, a much lesser-known work, has had two other splendid recordings in recent years, by the Yuval Trio (Deutsche Grammophon 2530 594) and the Beaux Arts Trio (Philips 6500 133), but the Copenhagen players persuade with a level of poetry in their approach and beauty in their playing that neither of the other teams guite matches. The recording itself is similarly outstanding in its realism, richness, and balance, a perfect complement to the performances in that it, too, leaves nothing unsaid and yet presents nothing exaggerated or out of proportion. If your dealer doesn't stock this record, make him order it for you-or order it yourself. R.F.

# RECORDING OF SPECIAL MERIT

MENOTTI: Sebastian, Ballet Suite. PROKO-FIEV: Romeo and Juliet, Ballet, Op. 64 (excerpts). Members of the NBC Symphony Orchestra, Leopold Stokowski cond. RCA ARL1-2715 \$7.98, (a) ARS1-2715 \$7.98, (c) ARK1-2715 \$7.98.

### Performance: Top-drawer Stokowski Recording: Remarkable

For a decade or more I have been agitating for a reissue of this 1954 Stokowski recording of the music from Gian-Carlo Menotti's early ballet score Sebastian (1944). It is not a worldshaking masterpiece, but it is highly effective theater music. It provided Stokowski with a prime vehicle for his particular brand of orchestral wizardry, and RCA's engineers really rose to the occasion. The same series of recording sessions also produced these excerpts from Prokofiev's Romeo and Juliet. which Stokowski assembled from the three concert suites. It is a moving distillation of the lyrical essence of Prokofiev's score. The performances in both instances show the Old Wizard in top form. The rhythmic attacks in Sebastian are brilliant and slashing, and the splashes of orchestral color evoke a Matisse in sound, reaching a peak in the processional episode with its Moussorgsky-like chorale, large and small bells, and off-stage trumpets. The Prokofiev music offers Stokowski a chance to revel in magnificent string sonorities, alternately of the utmost gossamer texture and of almost Wagnerian richness.

The entire disc is not only a showcase of marvelous orchestral performance, but sonically one of the two or three major Stokowski achievements since the great Philadelphia days. The wide-open spaces of Manhattan Center make for a broad and deep sonic front that is most effective in both works. As with most reissues from early stereo tapes, there is audible hiss, but not enough to interfere with one's enjoyment. D.H.

MOZART: Requiem Mass (K. 626). Ileana Cotrubas (soprano); Helen Watts (contralto); Robert Tear (tenor); John Shirley-Quirk (bass); Academy and Chorus of St. Martin-inthe-Fields, Neville Marriner cond. Argo ZRG 876 \$7.98.

## Performance: Correct but subdued Recording: Good

This Requiem is based on a new performing edition, by Prof. Franz Beyer of Munich, that corrects certain passages, where scholars believe that Franz Süssmayr, who completed the score upon Mozart's death, was less than properly attentive to Mozartian procedures. (Continued on page 160)

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The changes are subtle and probably not noticeable to the average listener, pertaining primarily to the distribution of orchestral parts, dynamics, and the trombone part writing. As far as I could determine, the only textual change (and a welcome one) is a slight extension of the "Hosanna in excelsis" ending of the Benedictus.

Neville Marriner renders a scrupulously musical and well-organized account of the Mass. His approach is dignified without being ponderous, and by using a well-drilled chorus of the proper size he avoids the heaviness that hangs over some of the other recorded versions. The tempos are well-judged and textures are clear. All four soloists are good without being outstanding. In their brief solos, the soprano and alto are heard clearly, the tenor and bass with less than optimum presence.

What I miss here is the sharpness of contours and the incisiveness that Colin Davis imparts to his admirable version on Philips 802 862. The Confutatis section and the brief brass interludes in the Benedictus (which evoke the solemn mood of The Magic Flute) are cases where dynamic contrasts and a sense of drama are insufficiently emphasized. Mozart the musical dramatist—and he was emphatically that, in his religious works as well—is not given all his due in this otherwise laudable undertaking. G.J.

MOZART: Sonata in D Major for Two Pianos (see STRAVINSKY)

## RECORDING OF SPECIAL MERIT

POULENC: Sonata for Violin and Piano. RAVEL: Sonata for Violin and Piano; Berceuse sur le Nom de Gabriel Fauré. Gerald Tarack (violin); David Hancock (piano). SINE QUA NON SUPERBA SA 2016 \$3.98, © C-2016 \$3.98.

# Performance: Sympathetic Recording: Very good

The music here is eminently attractive, the performances exceptionally sympathetic. The Poulenc sonata, heard so seldom that even now it will come as a "discovery" to most listeners, is most intriguing, with echoes of the Organ Concerto in the first movement and more than a few characteristic surprises in the Presto Tragico final movement; it could hardly ask for more effective advocates than Tarack and Hancock. Their approach in the familiar Ravel sonata may seem a little understated compared with the big, dramatic one of Wanda Wilkomirska and Antonio Barbosa (Connoisseur Society CS-2038), and the sound, which is really quite good, may seem a bit on the dry side, but this is a fully convincing performance, handsomely played, as is the welcome little encore. I would not be without the Wilkomirska/Barbosa Ravel, especially since the coupling on that disc is a glorious performance of the Grieg C Minor Sonata, but I wouldn't want to do without the Poulenc sonata either, and the Sine Qua Non price makes the duplication painless. R.F.

PROKOFIEV: Romeo and Juliet, Op. 64 (see MENOTTI)

PUCCINI: La Fanciulla del West (see Best of the Month, page 101)

#### RAVEL: Boléro (see DEBUSSY)

RAVEL: Sonata for Violin and Piano; Berceuse (see POULENC)

**ROCHBERG:** Carnival Music. Alan Mandel (piano). Black Sounds for Seventeen Players. Oberlin Wind Ensemble. Nach Bach. Igor Kipnis (harpischord). GRENADILLA GS 1019 \$6.95.

#### Performance: Good to excellent Recording: Varied

George Rochberg is consistently one of the most interesting—in the simple meaning of that overworked word—of American composers. He has never stood still, and, whatever the ultimate value of his various works, his skill, imagination, and thoughtfulness rarely let us down. The three works here were written in 1964 (*Black Sounds* and *Nach Bach*) and 1970 (*Carnival Music*), and they show an evolution from a rather austere, brooding, dissonant chromaticism to a wide-ranging mix



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of the modern serious idiom and the traditional vernacular.

Black Sounds, written or adapted for a dance by Anna Sokolow, is not in the serialist mode of Rochberg's earlier work but is rather an obvious but effective tribute to Varèse. Nach Bach, based on the E Minor Partita and written for Igor Kipnis, is a wonderful jumble of pure and distorted quotations from Bach surrounded by highly dissonant harpsichord comments, meditations, and punctuationsall perfectly suited to the instrument and its historical aura (and excellently played by Kipnis). Carnival Music-with its march, blues, and rag elements, highly altered quotations from Bach and Brahms, and rhythmic dissonance-is, as might be imagined, the most fun, especially in its lively Toccata-Rag finale. (It is notable that this was one of the first contemporary uses of rag, at a time when the rag revival was just getting under way.) But it is also a piece that has a great deal of scope in its essential nonpurity. Alan Mandel is effective in it-not surprisingly, since the work embodies the mixed musical genre this enterprising pianist has cultivated rather successfully. Incidentally, this is the only new recording on the album; the tapes of the others were originally made for Columbia and Desto. E.S.

**ROSSINI:** *Petite Messe Solennelle.* Kari Lövaas (soprano); Brigitte Fassbaender (alto); Peter Schreier (tenor); Dietrich Fischer-Dieskau (baritone); Munich Vocal Ensemble; Reinhard Raffalt (harmonium); Wolfgang Sawallisch, Hans Ludwig Hirsch (pianos); Wolfgang Sawallisch cond. RCA ARL2-2626 two discs \$15.98, © ARK2-2626 \$15.98.

Performance: **Good** Recording: **Very good** 

The Petite Messe Solennelle was written in 1864, when Rossini was seventy-two and had not been composing for the theater for more than thirty years. The music is sincerely devotional, but this Mass is neither "petite" nor really "solennelte." It is longer than any Mass written by Mozart, Cherubini, or Schubert, and almost as long as Beethoven's Missa Solemnis. And it is more "solemn" in the spiritual sense than in the liturgical or ceremonial sense, for it is far less theatrical than Rossini's earlier Stabat Mater. The new RCA recording, like most of its predecessors, uses the original modest setting for soloists, chorus, two pianos, and harmonium. In a way this is a pity, for no modern recording of the composer's later orchestral version existsthe old mono Period 588, heavily cut, was deleted years ago. In its original form, the Mass appears a bit too long, but the appeal of its sequence of arias, ensembles, and choruses cannot be denied. Many of these reveal the old master's melodic invention and compositional skills not only unimpaired but near peak form in his self-advertised vieillesse.

The performance here, though not outstanding, is good enough to be recommended. Most impressive among the soloists is Brigitte Fassbaender; she sings her first solo, *Crucifixus*, very movingly and then reaches great emotional heights in the beautiful final Agnus Dei. Soprano Kari Lövaas sings with appealing tonal purity and flawless musicianship, if a bit coolly for my taste. Peter Schreier excels in the ensembles, but for his somewhat operatically conceived aria, *Domine Deus*, I would prefer a more ringing, Italianate approach. (*Continued on page 162*)

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# The bass part lies a bit low for Dietrich Fischer-Dieskau, and, in his insistence on "interpreting" every phrase, he often fails to supply the smooth *cantante* line that is really needed here. Wolfgang Sawallisch officiates effectively, with well-judged tempos. The harmonium, when heard, is pleasant, and the chorus is very good. *G.J.*

SAINT-SAËNS: Cello Concerto No. 1, in A Minor, Op. 33 (see DVOŘÁK)

SCHUBERT: String Quartet No. 15, in G Major, Op. 161 (see Best of the Month, page 104)

SCHUBERT: Symphony No. 9, in C Major (D. 944). Chicago Symphony Orchestra, Carlo Maria Giulini cond. DEUTSCHE GRAMMO-PHON 2530 882 \$8.98, © 3300 882 \$8.98.

Performance: Idiosyncratic Recording: Good

Personal taste is very much involved in any assessment of Carlo Maria Giulini's highly individual account of Schubert's lyric-epic masterpiece. One may not like his idiosyncratic reading, but one must assume that the interpretation of a musician of Giulini's culture and wisdom is not mere caprice. Still, I'll be interested to hear what he will do with Schubert's Ninth five years from now.

Let me cite some chapter-and-verse of what happens on this recording. There is almost no meaningful tempo contrast between the opening andante and the ensuing allegro of the first movement; the ma non troppo element is emphasized almost to a fault, and the dactylic figuration of the main theme is treated in near-legato fashion. The slow movement is paced in a way that accentuates its somber, Winterreise aspect, with heavy stress on the element of pathos following the shattering climax. The scherzo is moderately paced, very crisply articulated, and given an extra complement of repeats-making it run almost double its normal length. Only the finale is played within the norms of the music as I have known it through the years.

Of course, the Chicago Symphony players follow their leader in the most polished and highly professional manner, and the solo wind work, especially the oboe part in the slow movement, is altogether superb. Frankly, I'm not able to live with this reading any more than I can with some interpretations by pianist Glenn Gould, but there may be more enterprising spirits than I who can. The recorded sound, except for overbearing brass at the slow-movement climax, is very good. D.H.

SIBELIUS: The Origin of Fire, Op. 32. Sulo Saarits (baritone); Helsinki University Chorus; Cincinnati Symphony Orchestra, Thor Johnson cond. Pohjola's Daughter. Cincinnati Symphony Orchestra, Thor Johnson cond. Song of My Heart, Op. 18; Finlandia Hymn, Op. 26a. KILPINEN: To Song. SONNINEN: Rippling Water. PALMGREN: Cradle Song. HAPPALAINEN: Pan. TRAD. (arr. Turunen): Finland, My Homeland; On the Hills of Karelia. Rafael Sora, Veikko Tyrvainen (soloists); Helsinki University Chorus, Martti Turunen cond. VARÈSE SARABANDE VC 81041 \$7.98.

Performance: A-1 Recording: Good to remarkable

SIBELIUS: Scènes Historiques, Opp. 25, 66; Rakastava, Op. 14; Valse Lyrique, Op. 96, No. 1. Scottish National Orchestra, Sir Alexander Gibson cond. RCA AGL1-2705 \$4.98.

Performance: Mostly good Recording: Good

The Varèse Sarabande disc offers the firstand so far only-recording of Sibelius' cantata *The Origin of Fire* for baritone, male choir, and orchestra. The release is part of a large-scale "rescue" operation to make available once more (or for the first time) significant recorded performances from the 1950's-most of them from labels that have become inactive over the past two decades.

I had a small hand in the instigation of the taping of the choral repertoire here, which took place during a 1953 American tour of the Helsinki University Choir. I knew that Remington was scheduled to do the recording in Cincinnati for a mono disc, but great was my surprise when A-V Libraries issued two-track stereo reels from the same sessions, engineered by the late Robert E. Blake. The results achieved in The Origin of Fire-a setting of the Kalevala counterpart of the Prometheus legend-were spectacular for the time, on the tape especially, but also on the Remington disc: the entrance of the chorus following the extended arioso-recitative for solo baritone is still a hair-raiser, and it affords unique insight into the role of Finnish speechrhythm in the music of Sibelius. Except for what seems to me a bit too much mid-range pre-emphasis, the Varèse Sarabande disc does a very decent job of recapturing the sound of the original (including some of the unavoidable background hiss). The Pohjola's Daughter reading by Thor Johnson, who conducted the Cincinnati Symphony from 1947 to 1958, is strong and well-knit, as is his handling of the cantata. The violin tone of the orchestra, however, sounds a bit thin both in the original 1953 issues and on the new album.

The overside Finnish male-choir pieces conducted by Martti Turunen, leader of the Helsinki University Choir for nearly a generation, are both varied and highly representative. It's a shame, though, that these unaccompanied choral works were taped in what sounds like a dead studio or rehearsal room rather than in the livelier ambiance of Cincinnati's Music Hall.

There has never been any doubt in my mind about Sir Alexander Gibson's credentials as a Sibelius interpreter, and this new RCA Gold Seal release under his direction is a most agreeable and varied mini-concert, with the lovely Rakastava (The Lover), for strings and tympani, separating the two sets of picturesque, if less substantial, Scènes Historiques. (The only other currently available domestic release that includes both sets is a full-price London disc that is neither as well played nor as well recorded.) Except for a rather too long and drawn-out treatment of the finale, Gibson's Rakastava is properly romantic and sensitive. The essence of this music is still best communicated by conductor Leif Segerstam on the imported Swedish Bis LP-19, but the RCA disc represents good value. D.H.

SMETANA: Trio in G Minor, Op. 15 (see MENDELSSOHN)

STRAVINSKY: Concerto for Two Solo Pianos; Sonata for Two Pianos; Zvietotchnoy Waltz; (Continued on page 166)

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KAROL SZYMANOWSKI's development as a composer was somewhat similar to that of his Hungarian contemporary Béla Bartók. Both were influenced in their young years by Richard Strauss and later by Debussy. And as folk music eventually assumed dominance in Bartók's style, so Oriental music (absorbed to some extent through exposure to Stravinsky) influenced Szymanowski. King Roger (1924), Szymanowski's second and last opera, bears traces of all these influences, but it is the Oriental element, shining through the lush textures of its orchestration, that is its most striking feature. The opera's mysticism and its departure from the dramatic conventions bring Bartók's Bluebeard's Castle to mind, but, while the latter's prevailing mood is worldly resignation, King Roger glows with religious fervor. Essentially about the clash between Christianity and paganism, it superimposes a fictional incident on the historical figures of a twelfth-century king of Sicily and his Arabian adviser, Edrisi.

Musically, I find the opera's Oriental-tinged harmonies and rich orchestral textures thoroughly absorbing. Szymanowski's idiom is boldly unconventional, but its character is essentially lyrical, and the vocal lines are constructed with a knowing mastery. The cast of the Polish-made Aurora recording rises to its interpretive challenges admirably. Baritone Andrzej Hiolski portrays the Amfortas-like character of the suffering King Roger with conviction and strong tonal resources. Kazimierz Pustelak is simply remarkable as the Shepherd (the god Dionysus in human form), a role that calls for strong dramatic utterances as well as gentle lyricism-and much of that in a high tessitura. Soprano Hanna Rumowska cannot quite cope with all the requirements of the part of Roxana (who sings the sinuous aria better known in Paul Kochanski's violin arrangement), but she does a more than adequate job. The cameo parts of Edrisi and the Archbishop are impressively handled. The chorus and orchestra perform with authority, and the sound is very good, though I would prefer fewer echo effects in the voices.

King Roger had many champions among scholars of its generation, but it has had relatively few performances. It was revived in Poland in 1965, and Charles Mackerras pre-



sided over another successful revival in London ten years later. Other impresarios should follow their example; the opera deserves it. —George Jellinek

EN or twelve years ago it seemed we were in for a rediscovery-or, really, just a plain discovery-of the music of Karol Szymanowski. A few recordings appeared, the violin concertos turned up here and there in concerts, and we were further reminded of the composer in Arthur Rubinstein's delightful book My Young Years. There were even discussions of importing a Polish orchestra and a group of soloists to stage a little Szymanowski festival that might tour several U.S. cities. The festival never materialized, and many of the recordings disappeared, but more recently we have had some records of some of the violin music and piano pieces from domestic as well as Polish sources, and Szymanowski's works have started to figure in the import lists again. Not too long ago we had Rowicki's fine record of the music for the ballet Harnasie on Muza; the three discs I am about to discuss are more interesting still, and their simultaneous appearance-hard on the heels of a complete King Roger-is a most encouraging sign.

Especially welcome, in the sense that they are familiar enough to have been missed, are the two violin concertos on the Aurora label. Neither of them has been available on records in the last few years, and both are among the most appealing of Szymanowski's major works. Wanda Wilkomirska's marvelous account of the First has circulated here previously on both Heliodor and MHS; the recording sounds a little brighter, also more close-up in focus, in the new English transfer. Charles Treger's version of the Second may lack something of the special quality Henryk Szeryng brought to the work in his richer-sounding but now deleted Philips recording (which certainly wasn't around very long), but it, too, is a fine, strong, committed performance, and Robert Satanowski, a conductor worth hearing from, backs him up splendidly. Neither Treger nor Szeryng achieved in the Second Concerto quite what Wilkomirska did in her concert performances with Michael Gielen and the Chicago Symphony Orchestra five years ago; I still hope she might get around to making new recordings of both concertos under optimum conditions, but there is a great deal of pleasure to be had from this Aurora disc and I am delighted to have it available.

HE Second Symphony, as Malcolm Rayment points out in his annotation for the Aurora release, is "Szymanowski's only available symphony in the accepted sense of the term," since No. 1 was never published, No. 3 (Song of the Night) is actually a choral work, and No. 4 is more or less a piano concerto. Symphony No. 2, a product of Szymanowski's middle twenties, is an intriguing piece, beautifully colored and imaginatively laid out. To be sure, the work does exhibit many of the influences so often spoken of in discussions of Szymanowski's music-almost literal echoes of Scriabin's Poem of Ecstasy in the first movement and of Strauss' Heldenleben in the second, while the final fugue, if not directly reminiscent of Reger, may remind some listeners of the fugal episode in Thus Spake Zarathustra. But none of this really gets in the way of one's enjoyment of the symphony or appreciation of Szymanowski's quite individual style; if this seems self-contradictory, I can only suggest the reader listen and form his own opinions-which I suspect will be highly favorable. The Lodz Philharmonic may not be one of the world's great orchestras, but it gives a good account of itself under Henryk Czyz's sympathetic direction, and the sound is quite good. The two short items that precede the first movement on side one, both better known than the symphony in various forms, are performed in the orchestral settings of Szymanowski's friend and early champion Grzegorz Fitelberg, who not only conducted both the première and the first recording of the Second Symphony but himself made the final revision of its second movement at the composer's request.

The original version of the etude conducted by Czyz happens to be one of the solo pieces Felicja Blumental plays on the other side of her attractive new Unicorn recording (origi-

> Twelfth-century mosaic depicts coronation of King Roger II of Sicily (1095-1154).



nated by EMI) of the Symphonie Concertante, a work Szymanowski listed as the fourth (and last) of his symphonies but which has assumed a place in the concerto repertoire. It is one of his more successful works, recorded by Rubinstein and said to have attracted the interest of Vladimir Horowitz. Blumental's response to it, as one would expect of a performer so long identified with this composer's music, is complete and convincing both technically and interpretively, and she enjoys first-rate collaboration from Poland's finest orchestra, under Kazimierz Kord, as well as fine sound. The same level of musicianship illumines the solo works, among which the masterly Theme and Variations is especially welcome; the two preludes also appear to be otherwise unavailable. Collectors of Carol Rosenberger's Szymanowski series on Delos will surely not begrudge themselves the duplication of the other four short pieces.

**O**NE hopes, of course, that there will be new recordings of the Third Symphony and the Op. 12 Concert Overture, and that by the time Szymanowski's centenary rolls around in 1983 his works will be appearing more frequently in our concert halls. In the meantime, this unexpected little Szymanowski festival on discs offers both the excitement of discovery and a great deal of solid enjoyment that is not likely to wear thin. —*Richard Freed* 

SZYMANOWSKI: King Roger. Andrzej Hiolski (baritone), King Roger; Hanna Rumowska (soprano). Roxana; Zdislaw Nikodem (tenor), Edrisi; Kazimierz Pustelak (tenor), the Shepherd; Marek Dabrowski (bass), the Archbishop; Anna Malewicz-Madey (contralto), the Deaconess. Chorus and Orchestra of the Warsaw State Opera House, Mieczyslaw Mierzejewski cond. AURORA 5061/2 two discs \$15.96 (from Qualiton Records, 65-37 Austin Street, Rego Park, N.Y. 11374).

SZYMANOWSKI: Violin Concerto No. 1, Op. 35. Wanda Wilkomirska (violin); Warsaw National Philharmonic Symphony Orchestra, Witold Rowicki cond. Violin Concerto No. 2, Op. 61. Charles Treger (violin); Warsaw National Philharmonic Symphony Orchestra, Robert Satanowski cond. AURORA AUR 5063 \$7.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

SZYMANOWSKI: Symphony No. 2, in B-flat Major, Op. 19. King Roger: Roxana's Song. Etude in B-flat Minor, Op. 4, No. 3. Lodz Philharmonic Symphony Orchestra, Henryk Czyz cond. AURORA AUR 5060 \$7.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

SZYMANOWSKI: Symphonie Concertante for Piano and Orchestra, Op. 60. Felicja Blumental (piano); Polish Radio Symphony Orchestra, Katowice, Kazimierz Kord cond. Etude in E-flat Minor, Op. 4, No. 1; Etude in B-flat Minor, Op. 4, No. 3; Prelude in B Minor, Op. 1, No. 1; Prelude in C Minor, Op. 1, No. 7; Mazurka in C Major, Op. 50, No. 1; Mazurka in A Major, Op. 50, No. 2. Felicja Blumental (piano). UNICORN UN1-75023 \$7.98 (from HNH Distributors, Ltd., P.O. Box 222, Evanston, Ill. 60204).

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Three Easy Pieces; Five Easy Pieces; Etude for Pianola. Paul Jacobs, Ursula Oppens (pianos). NONESUCH H-71347 \$3.96.

Performance: Strong Recording: Rich, close sound

STRAVINSKY: Concerto for Two Solo Pianos. **MOZART:** Sonata in D Major for Two Pianos (K. 448). Hans Pålsson, Amalie Malling (pianos). Bis LP 58 \$8.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: Delightful Recording: Excellent

Stravinsky was always very fond of the piano. He composed on it-or, at least, tested out all his music at the keyboard. But he was also very enamored of the sound of the piano, and its clarity and crispness perfectly encapsulate the Stravinsky esthetic. One piano is good enough, but how much better two-or, if not two planos, then two planists. The Concerto for Two Solo Pianos (that is, pianos without orchestra) is his major work for the medium. Banality and pomposity are never far away in this music, but camp and rhetoric must be resisted at all costs. The way out is a combination of precision, clarity, a sense of humor, and the ability to generate a bit of excitement. Paul Jacobs and Ursula Oppens, both excellent performers with a feeling for twentieth-century music, invest this work with size, importance, and what I would call a witty seriousness.

The Stravinsky two-piano sonata is a later and lighter work in a pure neo-Classical mode. The other pieces on the Nonesuch disc-music for piano, four hands, from the period of World War I-are all occasional works. There are two novelties here, the tiny, Satie-ish Zvietotchnoy Waltz, formerly thought to be lost, and the etude originally written for an Aeolian player piano (music later used in the Four Etudes for Orchestra). All of them are played affectionately, with spirit and without condescension.

Hans Pålsson is Swedish and studied in Denmark, Norway, and Germany; Amalie Malling is German and studied in Denmark and Northern Germany. Their Bis pairing of Stravinsky and Mozart is quite in order, and the performances are spirited and charming. The recording has an extremely fine texture of piano sound; the Nonesuch disc is darker and more intimate sounding. E.S.

SULLIVAN: Marmion Overture (see GIL-BERT AND SULLIVAN)

VAUGHAN WILLIAMS: The Poisoned Kiss, Overture: Two Hymn-tune Preludes; The Running Set; Sea Songs (see ELGAR)

VIVALDI: Il Cimento dell' Armonia e dell' Inventione, Op. 8 (see Best of the Month, page 102)

# RECORDINGS OF SPECIAL MERIT

VIVALDI: Concerto in D Major for Lute and Strings (RV 93); Trio in G Minor for Violin, Lute, and Strings (RV 85); Concerto in D Minor for Viola d'Amore, Lute, and Strings (RV 540); Trio in C Major for Violin, Lute, and Strings (RV 82). Konrad Ragossnig (lute); Eduard Melkus (violin, viola d'amore); Capella Academica of Vienna, Eduard Melkus cond. (Continued on page 169)



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State-

DEUTSCHE GRAMMOPHON ARCHIV 2533 376 \$8.98.

Performance: Exquisite Recording: Suave

VIVALDI: Concerto in F Major for Two Oboes, Bassoon, Two Horns, and Violin (RV 569); Concerto in F Major for Oboe (RV 456); Concerto in A Minor for Bassoon (RV 498); Concerto in C Minor for Flute (RV 441). Iona Brown (violin); William Bennett (flute, piccolo); Neil Black, Celia Nicklin (oboes); Martin Gatt (bassoon); Timothy Brown, Robin Davis (horns); Christopher Hogwood, Colin Tilney (harpsichord, organ); Academy of St. Martin-in-the-Fields, Neville Marriner cond. ARGO ZRG 839 \$7.98, © KZRC 839 \$7.98.

Performance: Festive Recording: Brilliant

Here is a brace of discs that should dispel the myth that Vivaldi wrote the same concerto five hundred times. The works consigned to the Archiv record by Eduard Melkus are profoundly intimate chamber music which, except for the D Major Lute Concerto, breathes a wistful nostalgia. Neville Marriner's collection, in contrast, is festive and openly brilliant. The blast created by the Concerto for Oboes, Horns, Bassoon, and Violin would throw any fox into a fit, and the A Minor Bassoon Concerto is one of the most sinister creations to come out of Baroque Italy.

Both records prove important points. Melkus demonstrates that original instruments can be played in such a manner that not even the most vehement critic of recordings using authentic performance practices could complain. And Marriner shows, as he usually does, that modern instruments and style can create an equally valid musical experience together with a great deal of vitality and excitement. Another point of difference in the two approaches is in the matter of ornamentation. All of the soloists on the Marriner disc are splendid, and all, for the most part, use no ornamentation. They are quite right; the music does not really need it and comes off beautifully without it. Melkus and his colleagues, on the other hand, make lavish use of ornamentation. They, too, are quite right, because the music they perform cries for it; without embellishment the results would be threadbare. The two trios are cases in point. They are really conceived as melodic works devoid of counterpoint. The single melodic line either alternates between the lute and the violin or is played at the octave. Both Ragossnig and Melkus, however, ornament the line simultaneously, but with different ornaments, creating a rich heterophonic texture which is authentic but rarely heard. Vera Schwarz, the harpsichordist, adds a lavish contrapuntal dimension with her bold realization of the figured bass. Melkus, in addition to his fine violinistics, gives an exquisite performance on S.L. the viola d'amore

WALTON: Sonata for Violin and Piano. BERKELEY: Sonatina for Violin and Piano. JOSEPHS: Chacony for Violin and Piano, Op. 38. Michael Davis (violin); Rosemary Platt (piano). ORION ORS 78292 \$7.98.

Performance: Very good Recording: Good

Who would have expected another recording of the Walton sonata so short a time after the (Continued on page 172)





JUDGING from a slew of recent releases, the classical guitar is, in both performance and popularity, in remarkably fine fettle these days. From the octogenarian master Andrés Segovia on down, there are worthy performers in virtually every age group, each bringing his or her own individuality to bear on the instrument and its repertoire, and sometimes helping to expand the latter.

"Reveries," Segovia's latest collection, was recorded by RCA a year ago last June, when he was "only" eighty-four. The range of repertoire is fairly typical of both the guitar's elder spokesman and the instrument generally—mostly rather short pieces and a good many transcriptions. The playing is Rubinstein-like in its autumnal glow, intimate and warm, projected without ostentation. Especially to be treasured are the eight little pieces Segovia transcribed from Schumann's Album for the Young; has The Happy Farmer ever sounded fresher or more innocent?

Celedonio Romero, who is far, far younger than Segovia and perhaps better known as a member of the four-guitar family ensemble known as Los Romeros, has not had a solo album for a number of years. The jacket of his new release on Delos features composer Joaquín Turina's description of him as "the poet of the guitar," and this appellation is also clearly reflected in the music on the record, which is atmospheric, unsplashy, and graced by a variety of subtle shadings and colors. Particularly delightful are the three Catalan pieces harmonized by Miguel Llobet and an unusually leisurely Albéniz Leyenda that is a most effective reversal of the typical virtuosic rendition. The album's sound is notable for its transparency and rich detail.

HE Romeros—Celedonio and his sons Pepe, Ángel, and Celin—may be heard together on a Philips disc of music for four guitars originally written for them by José Muñoz Molleda, Federico Morena-Torroba, and Francisco de Madina, plus a brief dance by Jerónimo Giménez that was transcribed by Pepe. The playing is lively, musical, extremely precise, and decidedly enjoyable even though there is nothing of great significance in the album's contents.

A two-disc Vanguard/Everyman set titled "The Classic Spanish Guitar" presents the fifty-five-year-old, Madrid-born Segovia pupil Alirio Diaz in a virtual treasure trove of standard Spanish (or Latin) repertoire, most of it familiar from guitar recitals both live and recorded. The playing here is technically as impressive as any I know, and the album should be appealing to anyone just beginning a collection of guitar records. (Veteran collectors may already have these recordings, since the two discs were released separately in the early Sixties.) Perhaps on occasion, as in Falla's Homenaje to Debussy, Diaz does not quite reach the intense depth of expression of a Julian Bream, but overall the set is a highly successful compilation.

Narciso Yepes, four years younger than Diaz, performs an essentially nineteenth-century program on his latest recording, "Guitarra Romantica'' from Deutsche Grammophon. Most of the selections are not especially familiar, and one in particular-the D Major Sonatina, Op. 71, No. 3, of Mauro Giulianimay be a first recording. All of them, including the delightful Fernando Sor variations on Marlborough (a tune usually known in English as For He's a Jolly Good Fellow), are expertly played. The reproduction is marvelously natural and not, as sometimes happens with guitar recordings, overblown, but my factorysealed pressing produced an almost continual barrage of most unnatural (from DG, at least) ticks and pops.

Vanguard/Cardinal has released an Ariola-Eurodisc recording of an exceptional recital by forty-five-year-old Santiago Navascués, who was born in Madrid and now teaches in Munich. The entire first side is devoted to twelve dances and settings of popular tunes by Gaspar Sanz (1640-1710); devotees of Rodrigo's Fantasía para un Gentilhombre may recognize the original vivacious Canarios on which Rodrigo based his last movement. Navascués plays the Sanz pieces with far more understanding of the stylistic niceties (correct ornaments and a logical, registrational approach to color and contrast) than do the majority of his colleagues, and his interpretations of works by Albéniz, Turina, Rodrigo, and Falla on the second side are riveting in their musicality and projection. It's all very intense—and very Spanish.

The last three discs represent the youngest generation of guitar performers now before the public. Manuel Barrueco, born in Cuba in 1952 and at present teaching in New York, devotes most of his Turnabout recital to Villa-Lobos. He plays eight (out of twelve) of the composer's guitar etudes, and each receives a high-powered, virtuosically unbridled treatment that is fast, aggressive, and quite breathtaking, if not always dynamically subtle. The performance of Villa-Lobos' Suite Populaire Bresilienne on the other side proves, however, that there is a more gentle and restrained side to Barrueco as well. Keep his name in mind; I think he'll go far.

One year younger than Barrueco, George Alexander Vick was born in Detroit, studied with both Pujol and Segovia in Spain, and now teaches in California. Klavier Records' disc of him playing both older works (by Sanz, Napoleon Coste, Luigi Legnani, and Sor) and two contemporary ones (Aurelio de la Vega's 1975 Sound Clouds and the largerscale Britten Nocturnal written ten years ear-

ANDRÉS SEGOVIA: Reveries. Gluck: Orfeo: Dance of the Blessed Spirits. Schumann: Album for the Young, Op. 68, Nos. 1, 2, 5, 6, 9, 10, 16, 26; Träumerei, Op. 15, No. 7; Romanza. Asencio: Mystic Suite. Castelnuovo-Tedesco: Platero and I: Ronsard. Moreno-Torroba: Castellana. Andrés Segovia (guitar). RCA ARL1-2602 \$7.98, (B) ARS1-2602 \$7.98, (C) ARK1-2602 \$7.98.

CELEDONIO ROMERO: Romantic Masterpieces. Moreno-Torroba: Fandanguillo; Danza. Pujol: Romanza. Turina: Garrotin; Soleares. Malats: Serenade Español. Granados: Danza No. 5. Tárrega: Adelita; Mazurca en Sol; Pavana. Albéniz: Leyenda. Llobet: Testiment de Amelia; El Noi de la Mare; La Fila Dora. Celedonio Romero (guitar). DELOS DEL-25441 \$7.98.

LOS ROMEROS: Classical Music for Four Guitars. Giménez: El Baile de Luis Alonso. Molleda: Triptico. Moreno-Torroba: Estampas. De Madina: Danza Rapsódica. Celedonio, Pepe, Ángel, and Celin Romero (guitars) PHILIPS 9500 296 \$8.98.

ALIRIO DIAZ: The Classic Spanish Guitar. De Mudarra: Fantasía. De Narvaez: Variations on "Guardame las Vacas." Milan: Fantasía No. 38. Sanz: Folías. D. Scarlatti: Sonatas in G Minor, G Major, and E Minor. Sor: Estudio No. 5; Estudio No. 12. Tárrega: Danza Mora. Albéniz: Asturias-Leyenda; Torre Bermeja; Granada; Sevilla. Granados: Danza No. 5; La Maja de Goya. Villa-Lobos: Etude No. 11. Malats: Serenata Española. Turina: Fandanguillo. Falla: Homenaje ("Pour le Tombeau de Claude Debussy''). The Three-Cornered Hat: Farruca (Miller's Dance). Segovia: Remembranza. Moreno-Torroba: Sonatina. Rodrigo: En los Trigales. De la Maza: Three Spanish Dances. Anon.: La Filla del Marxánt; Estrella del Mar; Cántico; Quirpa

lier) reveals Vick to be a well-schooled technician who has not yet mastered the art of shaping a line. The dynamics and effects are a bit unsubtle and the tone a little hard (although this could be the fault of a close-in, hard recording). The De la Vega piece is effectively performed, but the Britten could have been made more touching and affecting.

Toronto-based Liona Boyd's teachers include Bream, Yepes, Diaz, and Alexandre Lagoya. She has appeared often with Canadian popular singer Gorden Lightfoot, and, judging from the photographs on her new London album (her second recital disc), she is as comely as she is talented. The performances that come off best are those on the second side, all of lightweight contemporary fare except for The Old Castle from Moussorgsky's Pictures, which receives an extremely atmospheric rendition. The seventeenth- and eighteenth-century pieces on the first side, like the rest all quite brief, display Boyd's excellent technique but also a rather tensionless approach; the music is seldom made to move forward. Coloristic effects are well gauged, however, and the whole recital of twenty-one works has considerable charm, if no special profundity. Try the Venezuelan folk setting Totumo de Guarenas on side two for an appealing sampler. -Igor Kipnis

Guatireña. Alirio Diaz (guitar). VANGUARD/ EVERYMAN SRV 357/8 SD two discs \$7.96.

NARCISO YEPES: Guitarra Romantica. Giuliani: Sonata in C Major, Op. 15; Sonatina in D Major, Op. 71, No. 3. Sor: Variations on "Marlborough," Op. 28. Tárrega: Prelude in D Minor; Prelude in E Major; Marieta; Capricho Arabe. Narciso Yepes (guitar). DEUT-SCHE GRAMMOPHON 2530 871 \$8.98, © 3300 871 \$8.98.

SANTIAGO NAVASCUÉS: Music for the Spanish Guitar. Sanz: Twelve Dances from "Instrucción de Música Sobre la Guitarra Española." Albéniz: Granada; Malagueña. Turina: Fandanguillo. Rodrigo: En los Trigales. Falla: The Three-Cornered Hat: Farruca. Santiago Navascués (guitar). VANGUARD/ CARDINAL VCS 10137 \$3.98.

MANUEL BARRUECO. Villa-Lobos: Etudes for Guitar Nos. 1-3, 5, 7, 8, 11, 12; Suite Populaire Bresilienne. Guarnieri: Estudo No. 1. Chávez: Three Pieces for Guitar. Manuel Barrueco (guitar). TURNABOUT TV 34676 \$3.98.

GEORGE VICK: Virtuoso Guitar, Volume 1. Sanz: Canarios. Coste: Etudes, Op. 38, Nos. 1 and 6. Legnani: Caprices, Op. 20, Nos. 2 and 9. Sor: Grand Solo, Op. 14. De la Vega: Sound Clouds. Britten: Nocturnal, Op. 70. George Vick (guitar). KLAVIER KS-565 \$6.98.

LIONA BOYD: The Guitar Artistry of Liona Boyd. Pescetti: Presto. J. S. Bach: Arioso; Fugue; Invention; Andante. Cimarosa: Sonata in G Major; Sonata in B Minor. Besard: Courante; Ballet; Branle; Volte. Canonico: Totuma de Guarenas. Sagreras: Una Lagrima. Lauro: Tatiana; Andreina; Maria Luisa. Moussorgsky: The Old Castle. Feuerstein: Dance; Rests and Movements; Flight. Boyd: Cantarell. Liona Boyd (guitar). LONDON CS 7068 \$7.98, © 57068 \$7.98.





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Audio Dynamics Corp., Pickett District Rd., New Milford, CN 05776 • Distributed in Canada by BSR (Canada) Lid. Rexdal-, Ont. Please circle our reader service number and we'll send you a free record care gift. CIRCLE NO. 11 ON READER SERVICE CARD appearance of the one by Sidney and Jeanne Weiss on Unicorn RHS 341? The two more nearly contemporaneous items on the new Orion disc are probably more appropriate disc mates than the Elgar sonata on Unicorn, and, to my ear, they are a good deal more interesting in their own right. Lennox Berkeley's sonatina, in particular, is a gem-tight-knit, economical of gesture, yet richly expressive in Berkeley's characteristic style. Wilfred Josephs, whose Requiem received a good deal of attention a dozen years ago or more, has apparently not been represented on records at all until now, and it is surprising that it is not the Requiem that marks his discographic debut. But the Chacony is a brilliant workout in terms of both intensity and technical demands. It was composed, at about the same time as the Requiem (1962-1963), expressly for Michael Davis, whose proprietary zeal ensures that it makes the strongest impression in this recording. Since the two performances of the Walton sonata are about equally persuasive and both discs about equally well recorded, I would not hesitate to choose this very interesting program on Orion over the Elgar coupling on Unicorn. R.F.

WILLIAMS: Star Wars (see Popular Discs and Tapes, page 138)

# COLLECTIONS

AULOS ENSEMBLE: Masterpieces of the High Baroque. Boismortier: Concerto in E Minor, Op. 37, No. 6. Handel: Sonata in G Major, Op. 5, No. 4. Telemann: Tafelmusik, Part 1: Quartet in G Major. Leclair: Trio Sonata in D Major, Op. 2, No. 8. Aulos Ensemble. DES-MAR DSM 1017 G \$8.98.

Performance: **Promising** Recording: **Clear** 

The Aulos Ensemble just may have the secret of how to play old instruments authentically and still make music. All the pitfalls of earlymusic performance are here: quick tempos that can trivialize the music and cause scruffy ensemble, mannerisms that can become routine and thereby dehumanize the music, cadences that do not bring a piece to a real conclusion, and balance problems caused by a strident violin. On the other hand, when the ensemble hits it off, the playing is superb. The Telemann quartet finds them at their best. The siciliana rhythms of the opening lilt with just the right tempo. The balance is excellent and the texture delicate. The fugal movements drive their subjects to brilliant display, and the ornamentation is imaginative and tasteful. Pay careful attention to the saraband of the Leclair sonata; rarely will you hear such lavish embellishments played so well by an ensemble. Clearly the Aulos Ensemble is to be watched and encouraged. S.L.

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Performance: Very good Recording: Excellent

This is a very auspicious song-recital debut for Håkan Hagegård, the likable Papageno of Ingmar Bergman's cinematic Magic Flute, who is scheduled to make his Metropolitan Opera debut this season. The favorable impression gained from his previous operatic recital (Caprice 1062) is confirmed: Hagegård is a vital singer distinguished by a youthful sound (he is only thirty-three at this writing) and a soft-grained, malleable timbre. Moreover, he phrases with distinction and enunciates his texts with admirable clarity. The voice rings out firmly in the upper mid-range; some top notes are delivered with a sense of effort, and music calling for a low tessitura (An die Musik) reveals a certain lack of support. The singer's musicianship is never in doubt, however, and Thomas Schuback is an absolutely first-class partner.

The program has been ingeniously planned: all the songs are poetic dedications of one sort or another, addressed to music, death, hope, the moon, flowers, etc. There are a few triffes among the masterly inspirations, but such unfamiliar gems as Schubert's *An den Mond*, Brahms' *An ein Veilchen*, and Foerster's charming, Mahlerish *An die Laute* all deserve to be heard, especially when interpreted in so sympathetic a fashion. The engineering and disc surfaces on this import are flawless. [The record is also scheduled to be released here on the HNH label, at a dollar less.] *G.J.* 

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### Performance: Vital but uneven Recording: Very good

Herbert von Karajan describes her talent as "fabulous," and Elena Obraztsova is indeed a formidable artist whose singing communicates a fierce, voluptuous intensity. On records, though, without the counterbalancing strength of her magnetic theatrical personality, we cannot help noticing the technical flaws: sliding attacks, spread tone, impure intonation. The excitement generated by her portrayals sometimes manages to sweep everything before it: her Santuzza, Princess, and Eboli are stirringly projected here, and her Azucena is under better vocal control than she displays in the complete Trovatore under Karajan. Obraztsova's affinity for the French repertoire seems less impressive: her Dalila and Carmen are sizzlingly but less idiomatically portrayed. ("Mon coeur" and the Séguidille particularly suffer from unfocused singing.) Both conductors offer strong support, but Giuseppe Patanè balances the orchestra more effectively than does Robin Stapleton, who is heavy on percussion. G.J.

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64	Shure Brothers Sonic Research, Inc.	14
65	Sony Corporation of America	
66 67	Sony Corporation of America Sony Corporation of America	5
68	Soundcraftsmen	
69 70	Sound Machine Sound Reproduction, Inc.	
71	Sparkomatic	
72	Speakerlab Spectro Acoustics, Inc.	
44	Stanton Magnetics	6
73	Stereo Corporation of America	
74	Stereo Discounters Tandberg of America, Inc	
75	Tandberg of America, Inc Tandberg of America, Inc	
76 77	TDK Electroncis TDK Electronics	
78	TDK Electronics	
79 80	Teac Corporation	42 4
81	Teac Corporation Technics by Panasonic	
82 50	Top Discount Audio	
82	Top Discount Audio United Audio U.S. Pioneer Wisconsin Discount Stereo	



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# **17 MARANTZ COMPONEN** WHATEVER THE MIX IT'S ALV

Now there's a Marantz component system for everyone! From our most affordable to our finestwith 223 systems priced in between – Marantz delivers the same top Marantz quality and the same stunning Marantz look. There's never a compromise! And with so many systems to choose from, vou'll be able to find the exact match for your listening requirements and budget.

A MARANTZ EXCLUSIVE: MIXED SYSTEMS THAT REALLY MATCH. From the least expensive to the most expensive, all Marantz Pre-Amps, Power Amps, Console Amps, **Tuners and Front-Load** Cassette Decks feature the same front panel size, the same striking cosmetics, the same top quality design philosophy. So whatever component combination you choose, you'll have a perfect match. Only with Marantz.

BRINGING IT ALL TOGETHER. Once you have selected a system, only one question



The RM-3700 STACK RACK contains three Marantz components on fixedpositioned shelves, an accessory shelf and divided record compartment behind its fulllength smoked-glass door. The Marantz system shown includes the 6170Q Turntable, 2110 Tuner, 1180DC Integrated Amplifier, 5010B Cassette Deck and Design Series 930 Speakers.

remains: Where do you put it? With a Marantz STACK RACK you can bring it all together—with style. The RM-3100 "Professional" STACK RACK (at right) will accommodate up to four Marantz components equipped with optional rack handle adaptors. Or you may prefer the RM-3700 "Decorator" STACK RACK (above) which encloses three Marantz components behind its full-length smoked glass door. A perfect fit in either rack, your entire system will 300DC Amplifier with a 6370Q Turntable. be at your fingertips.

# BUILD NOW. ADD LATER.

Once you see and hear what Marantz components have to offer by way of more performance per dollar, striking appearance and unheard of flexibility, you'll be sold. You'll have a perfectly matched system tailored to your specific needs from as little as \$650\* to \$2100.\* And

don't hesitate when you want to upgrade any part of your system. Any Marantz component you upgrade to will match what you already have.

# MIX AND MATCH BY MARANTZ-IT'S ALL FOR YOU.

17 separate components from Marantz. Designed to mix and match into 225 different systems to give you unprecedented flexibility. Whoever you are. Marantz has the perfect system for you.

The three unit Marantz system shown at right includes the 2100 Tuner, 1090 Integrated Amplifier and the 5000 Cassette Deck with 6270Q Turntable. The four unit Marantz system shown at the far right includes the 2130 Tuner, 3650 Preamplifier, 5030B Cassette Deck and the

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\*These prices are for informational value only (actual prices are set by Marantz retail dealers) and do not include turntables, racks, optional rack handles or speakers. ©1978 Copyright Marantz Co., Inc., a subsidiary of Superscope, Inc., 20525 Nordhoff St., Chatsworth, CA 91311. All Rights Reserved.