BUYERS' GUIDE TO PORTABLE FM RADIOS * A HISTORY OF MILITARY MUSIC * STEPHEN SONDHEIM'S "FOLLIES"
but not very expensive, Mr. The Fisher 601.

The Fisher CP-100 switch to activate a special circuit that lets you create 4 channels out of 2-channel material. The circuit extracts ambiance information from the channels that you otherwise couldn't hear, and feeds it into the two rear channels. This information, which represents the sum of the reflected signals from the original recording source, enhances the stereo effect. The result is as close as you can get to true 4-channel sound, without actually starting with four separate signals.

So now you can hear your entire library of stereo LP's, tapes, and even FM-stereo broadcasts in 4-channel. And even more important, Fisher's 2+2 matrix system will let you play the various different stereo records and tapes that have been encoded with 4-channel information for playback on a 4-channel system. Of course, if for some reason you shouldn't want the 4-channel effect, you can still play your stereo records in stereo, and your mono source material in mono.

Speaking of sound sources, meet the Fisher CP-100.

The CP-100 is the ideal source of real 4-channel. For many reasons. It plays 8-track cartridges with several 4-channel programs on each cartridge. And there's quite a repertoire of cartridges available, from rock through pop to classical. (The CP-100 also plays the standard 8-track stereo cartridges.)

And the CP-100 is the only cartridge player built to Fisher standards. Wow and flutter are extremely low. Frequency response is 50 to 12,000 Hz, which compares favorably even with open-reel machines. And the CP-100 is extremely versatile. It will play one program after another, repeat one program as long as you want, or you can skip to whatever you want to hear. The cost? Only $169.95.

Plug the CP-100 into the 601, hook up four good speakers, and you're ready to listen to a 4-channel stereo system that's expensive, but not as expensive as it sounds.

Shown at right: four Fisher XP-7B speakers.

Fisher XP-7B speakers go beautifully with the new Fisher 601. The reason they sound so smooth is that they're 4-way systems, each with a massive 12-inch woofer, two 5¾-inch drivers (each assigned a different section of the midrange), and a pair of 3-inch wide-dispersion cone tweeters. At $159.95 each, the XP-7B's aren't even expensive.

The 701 is a true 4-channel AM/FM stereo receiver with 250 watts of power, push-button electronic tuning without moving parts (from the front panel or by remote control), toroidal filters on FM and other ultra-sophisticated electronics. In addition to being the most advanced piece of 4-channel equipment you can buy, it's also a sensationally fine receiver for conventional 2-channel stereo. Not to mention mono. $699.95.

The Fisher 701.

The Fisher CP-100

The Fisher XP-7B

The Fisher 601.
Introducing our expensive 4-channel receive

Last year, Fisher brought out the world's first true 4-channel receiver, the Fisher 701.

Now, you have to understand that a true 4-channel receiver requires nearly twice the electronics of an equally good 2-channel receiver.

And since the 701 was to be the world's first 4-channel receiver, we pulled out all the stops when we designed it. Which resulted in a piece of equipment that was very expensive. Incredibly good, but very expensive.

But now we think it's time to bring out a top-quality 4-channel receiver that more people can afford. One that doesn't cost a lot more than the best 2-channel receivers. So we're introducing the Fisher 601 4-channel AM/FM receiver.

Meet the Fisher 601. $599.95.

Even though the 601 is not the top of the Fisher 4-channel line, it's a no-compromise piece of equipment.

It's got everything: power, sensitivity, versatility, and wonderfully clean 4-channel sound. (We think 4-channel is as much of an improvement over 2-channel as 2-channel was over mono.)

200 watts is a lot of power.
The Fisher 601 has 200 watts of clean power. It's fully capable of driving two sets of speakers—four main, four remote. And it will drive them at concert levels with no sign of strain.

The FM tuner section has 1.8 microvolts sensitivity, which is on a par with the tuners in the finest 2-channel receivers Fisher makes. You'll get clear reception on stations that non-Fisher tuners pick up as static.

A full complement of controls.
The new 601 receiver is equipped with bass and treble controls, of course. Only 25¢! $2 value! Send for your copy of The Fisher Handbook, a fact-filled 80-page guide to high fidelity. This full-color reference book also includes complete information on all Fisher stereo components. Enclose 25¢ for handling and postage.*

They're of the Baxandali variety, which is a little more expensive than the kind other makers like to use. But they're also better. (They leave the midrange alone while you adjust the bass or treble.)

A muting switch quiets the noise between FM stations. There's a high filter so you can cut out unwanted high frequencies on the front channels, if you choose. There's a balance control, loudness contour and tape monitoring switches for front and rear channels.

Of course, the 601 has controls for mode, selecting speakers, and selecting a sound source. And the front and rear-channel volume controls slide like professional sound-studio faders.

The Fisher 2+2 matrix system.
4 channels out of 2.

Not only does the Fisher 601 give you fantastic sound with true 4-channel program material, it also incorporates a

*Please glue or tape coin on picture of handbook above.

Prices slightly higher in the Far West. Overseas and Canadian residents please write to Fisher Radio International, Long Island City, N.Y 11101.
Real 4-channel stereo is expensive.

But now it doesn't have to be very expensive.
For $279 we give you engineering. For an extra $20 we throw in some furniture.

To call the Rectilinear III a piece of engineering is a rather vigorous understatement. The equipment reviewers of leading hi-fi and other technical publications have gone on record that there's nothing better than this $279 floor-standing speaker system, regardless of type, size or price. (Reprints on request.)

But engineering is all you should expect when you buy this original version of the Rectilinear III. Its cabinet is 35" by 18" by 12" deep, handsome but utterly simple. For $279, you get quality and taste but no frills.

However, if you're the last of the big-time spenders, you can now escape this austerity for an extra $20. Because, for $299, there's the stunning new lowboy version of the Rectilinear III, 28" by 22" by 12 1/4" deep, with a magnificent fretwork grille.

Mind you, the actual internal volume of the enclosure is the same in both versions. So are the drivers and the crossover network. Only the cabinet styles and the dimensions are different. In the dark, you can't tell which Rectilinear III is which. They sound identical.

That's engineering.

(For more information, including detailed literature, see your audio dealer or write to Rectilinear Research Corp., 107 Bruckner Blvd., Bronx, N.Y. 10454. Canada: H. Roy Gray Co. Ltd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main St., Freeport, N.Y. 11520.)
THE MUSIC
DISCOVERING CLASSICAL MUSIC
A young reader's follow-up on the "classical crisis" .............................................. FRED POVEY ..... 48

THE BASIC REPERTOIRE
The annual updating inspires a restatement of principles ........................................... MARTIN BOOKSPAN ..... 53

THE DOMESTICATION OF MARY TRAVERS
Has the Distaff Dylan become Supermom? ................................................................. SANDRA SHEVEY ..... 62

THE SOUND OF MARY TRAVERS
"Power, authority, and a tone that's attractive to almost everyone" .............................. NOEL COPPAGE ..... 65

THE RUM-TUM-TUM OF THE MILITARY DRUM
Military music—a slightly irreverent salute ................................................................. ARAM BAKSHIAN, JR. ..... 66

THE FUTURE OF MUSICAL COMEDY
Stephen Sondheim talks about where it's going—and where he's taking it ...................... PAUL KRESH ..... 73

BEYOND THE BASIC REPERTOIRE
Hindemith's Der Schwanendreher ........................................................................... ROBERT S. CLARK ..... 99

STEPHEN SONDHEIM'S FOLLIES
A Pretty Girl is Like a Malady, Etc. ............................................................................ ARLENE CROCE ..... 110

THE EQUIPMENT
NEW PRODUCTS
A roundup of the latest high-fidelity equipment ............................................................... 19

AUDIO BASICS
Inside the Amplifier ..........................................................................................................RALPH HODGES ..... 22

TECHNICAL TALK
Testing Portable FM Radios; Hirsch-Houck laboratory tests of the Fisher 701 four-channel AM/ FM receiver, the Garrard Zero 100 automatic turntable, the Heath AA-29 integrated amplifier kit, and the 3M A-2000 speaker system ......................................................... JULIAN D. HIRSCH ..... 25

AUDIO QUESTIONS AND ANSWERS
Advice on readers' technical problems ........................................................................... LARRY KLEIN ..... 40

BUYERS' GUIDE TO PORTABLE FM RADIOS
A slightly seasonal survey of the current market ............................................................. JULIAN D. HIRSCH ..... 56

TAPE HORIZONS
The Importance of Demagnetizing .................................................................................... CRAIG STARK ..... 122

THE REVIEWS
BEST RECORDINGS OF THE MONTH .............................................................................. 75

CLASSICAL ......................................................................................................................... 81

ENTERTAINMENT .............................................................................................................. 101

STEREO TAPE ..................................................................................................................... 117

THE REGULARS
EDITORIALLY SPEAKING ............................................................................................... WILLIAM ANDERSON ..... 4

LETTERS TO THE EDITOR ............................................................................................... 11

GOING ON RECORD ......................................................................................................... JAMES GOODFRIEND ..... 44

ADVERTISERS' INDEX ......................................................................................................... 122

Cover: Photograph by Bruce Pendleton; design by Borys Patchowsky

Copyright © 1971 by Ziff-Davis Publishing Company. All rights reserved. Stereo Review, July 1971, Volume 27, Number 1. Published monthly at 1 Park Avenue, New York, N.Y. 10016, by Ziff-Davis Publishing Company—also the publishers of Airline Management and Marketing Including American Aviation, Boating, Business & Commercial Aviation, Car and Driver, Cycle, Electronics World, Flying, Modern Bride, Popular Electronics, Popular Photography, Skiing, Sking Area News, Sking Trade News, and Travel Weekly. One year subscription rate for U.S., U.S. Possessions and Canada, $7.00; all other countries, $8.00. Second class postage paid at New York, N.Y. and at additional mailing offices. Authorized as second class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUBSCRIPTION SERVICE, Forms 3579 and all subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 1099, Flushing, N.Y. 11352. Please allow at least six weeks for change of address. Include your old address, as well as new—enclosing if possible an address label—from a recent issue.
GLOBAL VILLEINAGE

With TV re-runs apparently beginning in January this year, it has lately become more difficult than ever to channel-hop one's way to what has been called, with stunning accuracy, the Least Objectionable Program. Musically speaking, this has always been a sucker's game anyway, for the Glen Campbell Hour was long ago unofficially designated the outer limits of the medium's aspirations in this area. One way of making this dubious distinction stick is to sabotage any other claimants to the title. I assume that this is what happened to the recent "special" starring the great and perdurable violinist Jascha Heifetz, a broadcast badly enough handled in its programming aspect that it will easily perform for the foreseeable future as the example of why nothing of its kind should ever be attempted again. (Classical music just isn't that dull, folks. Honest.)

The "Grammy" Awards program of the National Academy of Recording Arts and Sciences this year was another opportunity fumbled. What power but the conjoined might of the American record industry could collect so much musical talent in one place—and what medium other than TV could have presented so splendid a reservoir of performing artists with such inept and lumpish amateurism? It all went off rather like Prize Day at a small prairie high school (but without the charm) and was successful only in one small particular: it managed to make the subsequent Academy of Motion Picture Arts and Sciences broadcast look good.

If you are among those who fondly dream that the phosphors are brighter on other people's tubes, that there is some Great, Good Place where the triumph of each new TV season is something other than the discovery of a lower common denominator of taste, be disabused. I offer in evidence the prime contender for the Nadir of the Year Award, a broadcast of the Eurovision Song Contest, a musical event that may have solicited the protection of San Remo, but, failing apparently settled for sponsorship by Major Bowes. Under the charge of a benign young mistress of ceremonies who (perhaps significantly) spoke both English and French with a bit of a brogue, a troupe of performers marched one by one up to the microphone to present their countries' candidates for Song of the Year. From Yugoslavia to Portugal, from Finland to Malta they came, and if it proved anything at all it is that whether or not Europe ever has its Common Market, it will surely have a very common music.

Perhaps naively, I expected that in such an international array there would be detectable a certain national flavor—music from, say, Portugal, or Italy, or even Norway has managed, at least, to have been written anywhere, standardized, homogenized, cookie-cutter artifacts utterly without geography. The same can be said for the performers themselves—a Steve and Eydie from Belgium, a Sonny and Cher from the Netherlands (named, spookily enough, Saskia and Serge), a Maltese Humperdinck, and a Yugoslavian Tom Jones (who is in turn, of course, a Welsh Presley, etc.), most of them backed up by a gaggle of Supremish ooh-oooh choristers.

During the Great Depression in this country, various noble and generous men suggested that the way out of our troubles was a wholesale and indiscriminate sharing of the wealth. This, according to some calculators, would have given everybody in the country just about enough money for one good toot. I may be mistaken, but some kind of Townsend Plan seems to be the ruling philosophy behind TV programming. The world's culture (high, low, and otherwise), radically divided and shared, would leave us, I think, with something very like the Eurovision broadcast and its contest winner Severine, the entrant from Monaco, singing a thoroughly forgettable song called Un banc, un arbre, une rue (A Bench, a Tree, a Street), in a style owing much to Cilla Black, Petula Clark, Edith Piaf, and Barbra Streisand, for an audience of happy Papagenos. The Global Village, it appears, is merely the latest name for the land of Cockaigne.
AKAI has continued to supply for the past 20 years some of the world's highest quality audio-video products. It was AKAI that developed the world's first Cross-Field Head, the GX (glass and crystal ferrite) Head which is guaranteed for 150,000 hours of service life, and the world's lightest portable 1/4-inch tape video tape recorder.

These are the result of AKAI's extensive research, rich experience and ultra-precision processing techniques necessary for the assembly and manufacture of various components. See the following pages for some of AKAI's representative products.
the GX generation

150,000 hours service life!
Dust free/Wear free/
Preeminent recording

AKAI's GX-365D, GX-280D and GX-220D have formed a new GX generation. All three decks boast the AKAI-developed GX (glass and crystal ferrite) Head which is the first of its kind in the world. In conventional heads, tape dust and wear greatly reduce sound quality. But our GX Head is "dust free", "wear free" and guaranteed for over 150,000 hours of service life! In case this head should become faulty before 150,000 hours of use, it will be replaced free of charge. AKAI engineers were successful in focusing the magnetic bias field of the GX Head so that the influence of the bias is drastically lessened. And greater frequency response was obtained because an ideal gap width and gap depth were developed and ultra-precision processing techniques were used in the manufacture of this head.

GX-365D Professional Stereo Tape Deck
Features 3 heads, world's only automatic continuous reverse (Reverse-O-Matic), sensing tape reverse, automatic volume control (Compute-O-Matic), magnetic brake, one hysteresis synchronous 3-speed motor for capstan drive and two eddy-current outer-rotor motors for supply and take-up reel drive, and automatic stop/shut off.

GX-280D Stereo Tape Deck
Features 3 heads, world's only automatic continuous reverse with sensing tape, and 3 speeds. The two 7-inch reels can be completely covered with an optional plastic dust cover.

GX-220D Stereo Tape Deck
Features 3 heads, automatic continuous reverse with sensing tape, and 3 speeds. Two 7-inch reels can be completely covered with an optional plastic dust cover.

AKAI products will be available in the U.S.A. from July 1, 1971

AKAI AMERICA, LTD.
2139 E. Del Amo Boulevard/Campton, California 90220 (213) 537-3880
Manufacturer
AKAI ELECTRIC CO., LTD.
P.O. Box 21, Tokyo International Airport, Japan
An entirely new world of sound has been created by AKAI's electronics engineers who have developed a new and sophisticated line of 4-channel surround stereo equipment. Included in this line are the exciting 1730-SS 4-Channel/2-Channel Stereo Tape Recorder and the 1730D-SS 4-Channel/2-Channel Stereo Tape Deck. With either system, you're completely surrounded in sound with four speakers—left and right in front, and left and right in the rear. This system gives you a real "sense of presence", the feeling of being exactly in the middle of a live performance. Both models are designed to be used for not only 4-channel stereo but also 2-channel stereo as well.

The 1730-SS, equipped with four built-in pre-amplifiers, two built-in main amplifiers, and two monitor speakers, is designed for amazing versatility. It can be used not only as a complete 2-channel stereo tape recorder, but also as an exciting 4-channel stereo tape recorder by simply adding an extra pair of AKAI speakers to your existing 2-channel stereo amplifier/speaker system.

The 1730D-SS is perfectly matched with AKAI's exclusive AA-6100 Solid State 4-Channel System Pre-Main Amplifier. This amplifier has 80W music power for dynamic 4-channel stereo sound and accommodates both 4-channel and 2-channel stereo operation.

Cross over to 4-channel stereo and enjoy the multidimensional sounds no 2-channel system can ever achieve.

Audio & Video

AKAI

AKAI AMERICA, LTD.
2139 East Del Amo Boulevard/Compton.
California 90220  (213) 537-3880
Manufacturer

AKAI ELECTRIC CO., LTD.
P.O. Box 21, Tokyo International Airport, Japan

AKAI products will be available in the U.S.A. from July 1, 1971.

JULY 1971
Revolutionary... precision... versatile... these are the maxims that guide AKAI at all times in its quest for the best. No matter which AKAI product you choose, it's sure to be revolutionary, precision-made, and the best in its class.

CS-50D Cassette Stereo Tape Deck
This is a masterpiece, incorporating the world's first "INVERT-O-MATIC" mechanism which makes possible automatic reverse recording. This revolutionary cassette tape deck automatically stops after two full hours of hi-fi stereo recording with AKAI's C-120 cassette tape. The "INVERT-O-MATIC" mechanism also makes possible automatic continuous reverse playback for as long as you like. Instant manual reverse can also be effected.

CR-80D 8-Track Cartridge Stereo Tape Deck
This sensational cartridge tape deck puts you in the professional recording class. It boasts a precision-designed 1-micron gap head, for superb frequency response, that makes the difference between ordinary and highest quality performances. The CR-80D also incorporates fast forward control, automatic stop, continuous play button, and many other outstanding features.

CR-80T 8-Track Cartridge Stereo Tape Recorder/Tuner
With this versatile tape recorder you can make direct recordings on cartridges from FM and AM broadcasts. It not only has a built-in tuner but also phono jacks for recording directly from turntables. And it can be used for a convenient public address system as well. The CR-80T also boasts a 1-micron gap head for extra wide frequency response, fast forward control, automatic stop control, and continuous play button.

AKAI's CS-50 Cassette Stereo Tape Recorder and CR-80 8-Track Cartridge Stereo Tape Recorder are also available.

AKAI products will be available in the U.S.A. from July 1, 1971
AKAI's X-330 Stereo Tape Recorder is the ultimate for those who seek highest sound quality for long hours. This multi-purpose tape recorder incorporates precision-processed professional mechanisms of ultra-durability. The Cross-Field Head incorporated in the X-330 is AKAI's unique recording head that gives you true sound reproduction. This exclusive and world-patented head has created a sensation in the tape recorder world by offering one of the widest recording ranges available today. And high fidelity recording can be attained even at the very slow speed of 1-7/8 ips.

Our X-330 is strictly for the professionals. With the use of 10-1/2-inch reels, the maximum continuous recording time is 24 hours monaural and 12 hours stereo.

Continuous playback can be performed as long as you like with its automatic continuous reverse. This tape recorder also boasts sensing tape continuous reverse, manual reverse, 4 heads, 3 motors, 3 speeds, automatic stop/shut off, and magnetic brake. AKAI's X-330D Stereo Tape Deck is also available.

Other AKAI products incorporating its unique Cross-Field Head include the M-10 Stereo Tape Recorder and the X-200D Stereo Tape Deck. The M-10 features 3 heads, 3 motors, 3 speeds, automatic continuous reverse with sensing tape, manual reverse, automatic stop/shut off, and instant stop control. The X-200D features 3 heads, 3 motors, 3 speeds, automatic continuous reverse with sensing tape, manual reverse, automatic stop/shut off, instant stop control, and solid state pre-amplifier with two integrated circuits.

Audio & Video
AKAI
AKAI AMERICA, LTD.
2139 East Del Amo Boulevard/Compton, California 90220 (213) 537-3880
Manufacturer
AKAI ELECTRIC CO., LTD.
P.O. Box 21, Tokyo International Airport, Japan

AKAI products will be available in the U.S.A. from July 1, 1971

JULY 1971
CIRCLE NO. 3 ON READER SERVICE CARD
AKAI offers amplifiers and speakers of uncompromising standards. If you're planning a high performance audio system, it'll be worth more than your time to look into AKAI's amplifiers and speakers designed for audiophiles.

AKAI's high performance AA-8500 Solid State AM/FM Multiplex Stereo Tuner Amplifier has a total music power of 240W and incorporates a field effect transistor and integrated circuits to assure high FM tuner performance. Pre and main amplifiers can be separated, enabling the use of multichannel amplifiers. Frequency response is 20 to 50,000Hz (–3dB) and S/N ratio is better than 80dB (Aux.).

The AA-6600 and AA-6300 Solid State AM/FM Multiplex Stereo Tuner Amplifiers are also designed for versatility and extra-sensitivity to produce the strength and delicacy of every pitch of sound when connected with your high quality audio equipment.

AKAI's numerous hi-fi stereo speaker systems are designed to fit different situations and appeal to different tastes. Shown on this page are three widely different systems. The SW-170A is a 5-way, 6-speaker system with a 15" linear travel piston edge woofer. The SW-125 is a 3-way, 3-speaker system with a 10" linear travel piston edge woofer. And the SW-35 is a "jet stream" speaker system which has a 5-1/4" flange speaker with a linear travel piston edge. The cabinet produces a "jet stream" flow of unbelievably clear bass sound equivalent to large-sized speaker systems. There's an AKAI speaker system for any need. Listen to our speaker systems at any of our authorized dealers. You'll quickly notice the difference.

Service and maintenance facilities are available in the U.S.A. Write to us for a list of AKAI service shops.

I'm interested in AKAI's audio and video equipment. Please send me free literature.

Name
Title
Address
Phone
City
State
Zip

Audio & Video

AKAI AMERICA, LTD.
2139 East Del Amo Boulevard/Compton, California 90220 (213) 537-3880

Manufacturer

AKAI ELECTRIC CO., LTD.
P.O. Box 21, Tokyo International Airport, Japan

AKAI products will be available in the U.S.A. from July 1, 1971

CIRCLE NO. 3 ON READER SERVICE CARD
LETTERS TO THE EDITOR

Rock Ruckus

- "A Bad Year for Rock" by Noel Coppage (May issue) is one of the most inane articles I've ever read outside a movie fan magazine. The author seems to address people who think rock is one of society's causal agents rather than merely an effect. He writes as if he believed the ant who said, "See what a dust I make!"

- I have trouble believing that a grown-up can take rock so seriously. Oh, I like rock, just as I like serious orchestral and chamber music, but it is, after all, only another kind of music. But Mr. Coppage seems to take rock rather too seriously. He even says that he concentrated on rock music during 1970. What exercises me so much is that he writes such a pretentious piece of twaddle about something that matters so little. His tentative advancement of the theory that rock goes in cycles is handled with all the care and fancy padding that usually precedes real earth-shakers like the drifting-continent theory. Moreover, he does your younger and more short-sighted readers a disservice by saying things like "... rock has become... the people's music." Oh, come on! What people's? If rock were "what people are really up to," as Mr. Coppage says, it wouldn't stimulate trendy, provincial articles like his. If it were what people are really up to, it would be sought after, not merely tolerated.

- Talbot M. Wright
Edison, N.J.

Mr. Coppage replies: "What exercises me is that people get so exercised over matters they clamor are trivial. Now me, I consider Tim Holt movies unimportant, and when some writer writes a pretentious piece of twaddle about Tim Holt movies, I try to keep my cool. And you know what? it isn't even difficult. If the subject under discussion is 'only' music, and not worth talking about, then what are we all—Mr. Wright included—doing here?"

- Miami Volunteers

- I was delighted with James Goodfriend's "Going on Record" column titled "Volunteers" (May). Add me to the list of quixotic windmill-tilters. As a new Miami resident, I found that this fine city with the unbeatable climate is not the cultural desert so many have dubbed it. Although certainly not prime culture country, Miami shows definite signs of bursting out. The young people in the many colleges hereabouts seem a music-loving group, offsetting the tendency of so many oldsters here to turn to bingo, professional sports, and TV trip in their dotage.

- Until recently, WKAT-FM was the only radio station here worth listening to, and even that was in bad shape—its plant was mono only and audibly senile, drifting off, fading out, and subject to unexplained silences and strange noises—but it offered splendid music twelve hours daily, with no commercials whatever, and gave us the finest performers and programs. Many music lovers here were tuned in permanently, hoping for improvements. Several months ago, the ailing parent produced an infant. The station was sold to someone bent on making it a model culture outlet, and promises of marvels to come have been made in print and on the air. This new station, WTMF-FM, will be broadcasting twenty-four hours of fine music in stereo, plus news and other timely material. The public is being asked to express its views and feelings to the new managers. I believe that many, many people have responded and are encouraging this new source of pleasure and enrichment. Add Miami to your list of promising communities. May this encourage others!

- Joseph Lev
Miami, Fla.

Vocabulary of Vocalism

- Henry Pleasants' "Shorter Vocabulary of Vocalism" (May) was refreshing and also enlightening, because it was more technical than most articles of this kind. Those of us who are principally interested in vocal music talk so much about singing that it is good for us to stop and re-examine the terminology we use. I find it hard to believe that the traditional division of registers—chest, middle, and head—is metaphorical rather than actual, but I'm prepared to accept Mr. Pleasants' word for it. I wish you could find a medical authority who could explain in physiological terms precisely what goes on inside singers' chests, throats, and heads.

- Robert M. Connolly
New York, N.Y.

- Since most singers know all things, I suppose they will pay scant attention to Henry Pleasants' "Vocabulary of Vocalism." More's the pity, since that intelligent article might revive their instinct for self-preservation. Sound vocal technique and individual imagination produce variety and sincerity of expression—a combination of merits notably lacking on today's operatic stage.

- William Seward
New York, N.Y.

Multiple-Frequency Tone Controls

- I have just read Julian Hirsch's article on the new multiple-frequency tone controls ("Technical Talk," March). I have about $3,000 worth of state-of-the-art audio equipment in my home, and I consider my recent investment in the 99.95 Metrotec Frequency Equalizer the best buy of all. Metrotec's choice of 10 kHz for the highest frequency was especially wise. This control helps eliminate "tweets" sometimes heard on AM radio. Sixty Hz is, of course, just right for reduction of 60-Hz hum, and this represents just about the lowest bass usually recorded. The 3.5 kHz control proved just right to introduce a 'presence peak' that clears up distant or muffled sounding recordings. (I can now understand what they are saying on some of those muffled-rock records!)

- I find that AM radio can be greatly improved by the use of about 6 to 10-decibel cut at 240 Hz and 6 to 10-decibel boost at 3.5 kHz. The other controls are set at zero. The secret of using this type of control is not to overdo it. The temptation is to equalize everything, whether it needs it or not.

- Clyde E. Wade, Jr.
Little Rock, Ark.

"Classical Crisis" (Cont.)

- While all the articles on the "classical crisis" (February) make valid points, I'd like to mention one thing harder to find than a specific classical record—a specific classical cassette. With all due respect to those stores that maintain a fairly decent stock of classical records (such as Sam Goody and Korvette's in Manhattan), they still fall far short on classical-cassette stock. Since this is supposedly one of the coming powerful media, there is not much visible effort being made to supply the newer, much improved prerecorded tapes to consumers.

- Jack Kernan
Merrick, L.I., N.Y.

- Your excellent survey of the "classical music crisis" makes me wonder whether current marketing technique has severed that vital link between the manufacturer and the buyer. Grocery-store merchandising, combined with musically ignorant sales personnel and an ever-increasing desire to promote only the current hits, has created a situation in which a record can be released, withdrawn, and finally deleted without the potential buyer's knowing anything about it. And the manufacturer is left wondering why it didn't sell. Since record retailers no longer provide the facilities, the only reliable way to evaluate a record is to hear it played on the radio. Unfortunately, this sometimes results in such a delay that the record has been deleted before the music is actually broadcast. If good music is to survive this crisis, somebody should devise a better way to sell it.

- Brian R. May
Santa Ana, Calif.

- If there had not been such an emphasis on rock and youth-cult music over the past decade, with its subsequent unacceptability by the under-twenty group, there would be no "crisis in classical music." More people buy records other than the classics and more exposure is given to music other than the classics on radio, television, and in the movies than...
ADC: WORLD'S MOST PERSNICKETY SPEAKER MAKER.

We make 303AX speakers for fussy audiophiles. Each one is crafted by hand and contains a two-way acoustic suspension system that's accurate enough to please even the most discriminating listener. The ADC 303AX lacks the distortion and coloration often found in speakers in its price range. Which makes it a superb value in a full-sized bookshelf speaker.

Of course, there's only one way to find out how really accurate our speaker system is. Go to your nearest ADC dealer and compare it to other models. After all, hearing is believing!

SPECIFICATIONS

- Type ... Bookshelf.
- Cabinet ... Oiled Walnut.
- Dimensions ... 233/4" H x 13" W x 113/4" D.
- Weight ... 37 lbs. each.
- Frequency Response ... 33Hz–20kHz 
  + 3 db (measured in average listening room).
- Speakers (2) ... High accuracy, wide dispersion tweeter with Hi Flux Magnet and 10" high compliance woofer.
- Nominal Impedance ... 8 ohms.
- Power Required ... 10 watts min.
- Price ... $110 suggested resale.
- Write for details about other ADC speaker systems. From $55-$350.

(Continued on page 16)

ERNEST BIRCHENOUGH
Portland, Ore.

- Using a line of logic that may charitably be called nonsensical, Mr. Richard Thomas ("Letters," April) has seen fit to lay the blame for the crisis in classical recording squarely at the feet of the person who owns a tape recorder. One of the few statements that Mr. Thomas made that is accurate is that tape costs less than records. This is true, but, unfortunately, to record on tape one needs a tape recorder, which certainly is not cheaper than a record player, and one must spend time, which isn't cheap either. Obviously, your average stereo nut will have a high-priced system complete with a high-priced tape recorder is not a skinflint, but owns a tape recorder for other reasons.

Primary among these reasons is quality of the finished product. I dislike snap, crackle, and pop with my music, and I have found that I can record "live" broadcasts with less noise than I get on a disc. Variety also plays a part: I will bet money that Mr. Thomas doesn't have a record of Sibelius' Symphony No. 2 with George Szell conducting the Cleveland Orchestra, but I do. I taped it off the air from a program broadcast by radio station WNCN. It took three dollars for tape, an hour or so to adjust the recorder, and it knocked the hell out of a Sunday afternoon, but the end product was worth the effort.

FRANK K. CAVALLITTO
Brooklyn, N.Y.

The Editor replies: "Mr. Cavallitto gets no brownie points for preferring good sound, nor for the fact that his taping activities have cost him sore in time, effort, tape, and a recorder that is 'not cheaper than a record player.' Quite beside the point. All off-the-air taping is parasitical, and Mr. Cavallitto's is no exception. When he tapes 'live' broadcasts, he is profiting without paying for the labor of musicians, singers, conductor, and others, unless he has bought tickets to the same concert or supports the orchestra with donations. (There is, in any event, very little 'live' broadcasting around these days, and what there is is partly supported by record sales of the musical aggregations concerned.) When he tapes broadcast discs, his hobby is being subsidized not only by the artists and the record company, but by those people who did buy the disc. His expensive equipment, far from being proof that he has paid his dues somewhere, simply falls into the category of burglar's tools. The logic is inescapable: if everyone does as Mr. Cavallitto does, there would be no music to tape off the air, there would be no recordings made, and a lot of people would be out of work.

- February's "Crisis in American Classical Music Recording" series discussed the merits of the 'Greatest Hits' or 'Great Moments From' discs. I believe that such records have considerable value. First, sales from these records provide much-needed revenue to the record companies at little expense. Second, and far more important, they provide a transition from popular music to classical music. You can hardly expect young people who have had almost no exposure to serious music to rush out and spend nine dollars on a recording of Mahler's Second Symphony. But the availability of 'Greatest Spectaculars' and light classics such as the 1812 Overture and William Tell Overture, allow people with a marginal interest in the classics to make the transition in easy steps. After one develops a deep interest in classical music these records hold little attraction, but they are eminently suitable for demonstrating a stereo system or for trying to convert one's friends into lovers of serious music.

ARTHUR SCHUETZ
Doylestown, Ohio

- Seymour Solomon's attribution of declining classical record sales in part to the contemporary music ("And Now, a Few Words From Your Local Record Companies," February) needs elaboration. New music that the public finds engaging sells better than great music of the past. As time turns novelty to cliché, we put aside all but the few works that evoke in us the extraordinary experiences we associate with art. Many of these few, indeed, are so remote from current styles as to seem obscure to the casual music lover. Today most people prefer Michener to Dickens, Simon to Aristophanes, Wyeth to Vermeer. They discover these artists by reading about them in the magazines, and one must spend time, which isn't cheap, to hear the extraordinary experiences we associate with art.

JAMES FELDMAN
Pensacola, Fla.

- Perhaps the problem of an imbalance in record repertoire could best be demonstrated by an examination of the listings in the Schwann catalog under Handel: twelve recordings of Messiah, but none of Alimia, Roderigo, Agrippina, Rinaldo, Il Pastor Fido, Teseo, Silla, Amadigi, Radamisto, Muzio Scacrevola, Flavio, Otone, Flavio, Scipione, Alessandro, Meto, Riccardo Primo, Sirve, Tolomeo, Lazzaro, Parlene, Poro, Ezio, Orlando, Arianna, Imeneo, Deidamia, Jupiter in Argos, and so forth.

JOEL BIXLER
New Concord, Ohio

Well, RCA has recently released a new recording of Orlando, so if Mr. Bixler will just be patient . . .

- Although the record companies have been roundly condemned for every sin from profit-seeking to inefficiency, perhaps it won't be amiss for one small voice to thank them for such treasures as Toscanini's interpretations, Stravinsky and Copland on Stravinsky and Copland, the preservation of every voice from pre-Caruso days to the present, and the opportunity to hear works that the Suburban Symphony Society wouldn't touch with a ten-foot baton. Are we supposed to believe that Mahler, Nielsen, and Berlioz are "in" because of the natural course of world events? Or is it (Continued on page 16)
Sleek, black and omni-directional, the 5303 virtually eliminates tight polar patterns on the upper highs. Gives you deep, full timbred bass on the ultra lows. Banishes that bothersome "hole in the middle." Ends nailing your chair down to that one "best" spot common with conventional speakers. Gives you the freedom to roam around your own room, enveloped in rich stereo sound.

The 5303 utilizes four woofers and four horn tweeters. Flawlessly reproduces the 20 to 20,000 Hz range. Handles up to 80 watts input with ease. Can be mounted on stand (included), or hung from ceiling to give you more living space.

If your tastes are more traditional, then check out JVC's Model 5340. It handles up to 80 watts. Integrates a cellular horn in its powerful 4-way speaker system. There are many other fine speakers in the JVC line. See and hear them at your nearest JVC dealer. He will be proud to demonstrate them, just as you will be proud to own them.
FREE...Any 3 Stereo LPs or Cassettes...
WITH NO OBLIGATION

Record Club of America when other record or tape clubs would have accepted them free.

RECORD CLUB OF AMERICA The World's Largest Record and Tape Club

See for yourself why over 1 1/2 million record and tape collectors paid $5 to join Record Club of America when other record or tape clubs would have accepted them free.

TYPICAL "EXTRA DISCOUNT" SALE

$4.38 LPs average as low as $1.96
$5.38 LPs average as low as $2.25
$6.38 LPs average as low as $2.56

Savings of 63% or more from recent Club sales up to $4.42 per LP. Start these giant savings now... not after you fulfill your obligation like the other clubs.

RECORD CLUB OF AMERICA—The World’s Largest Record and Tape Club
TO BUY ANYTHING EVER!

Yes, take your pick of these great hits right now! Choose any 3 Stereo LPs (worth up to $20.94) or any 1 Stereo Tape (or cassette, worth up to $13.96) FREE...as your welcome gift from Record Club of America when you join at the low lifetime membership fee of $5.00. You can defer your selection of FREE items and choose from an expanded list later if you can't find 3 LPs or 1 Tape here. We make this amazing offer to introduce you to the only record & tape club offering guaranteed discounts of 33 1/2% to 79% on all labels—with no obligation or commitment to buy anything ever. As a member of this one-of-a-kind club you will be able to order any record or tape commercially available, on every label—including all musical preferences. No automatic shipments, no cards to return. We ship only what you order. Moneyback guarantee if not satisfied.

AT LAST A RECORD AND TAPE CLUB WITH NO "OBLIGATIONS"—ONLY BENEFITS!

Ordinary record and tape clubs make you choose from a few labels—they own their own! They make you buy up to 12 records or tapes a year—usually at list price to avoid obligation. And if you forget to return their monthly card—they send you an item you don't want and a bill for $4.98, $5.98, $6.98, or $7.98! In effect, you may be charged almost double for your records and tapes.

BUT RECORD CLUB OF AMERICA SENDS ONLY WHAT YOU ORDER!

We're the largest all-label record and tape club in the world. Choose any LP or tape (cartridges and cassettes), including new releases. No exceptions! Take as many, or as few, or no selections at all if you so decide. Discounts are GUARANTEED AS HIGH AS 79%! You always save at least 33 1/3%. You get best sellers for as low as 9n.

RECORD CLUB OF AMERICA SENDS ONLY WHAT YOU ORDER!

In effect, you may be charged almost double for your records and tapes.

Ends All That!

And completely satisfactory or replacements will be made without question. RECORDS AND TAPES GUARANTEED—factory new and completely satisfactory or replacements will be made without question.

Guaranteed Instant Service

All LPs and tapes ordered by members are shipped same day received (orders from the Master Catalog may take a few days longer). ALL RECORDS AND TAPES GUARANTEED—factory new and completely satisfactory or replacements will be made without question.

Money Back Guarantee

If you aren't absolutely delighted with our discounts (up to 79%)—return items within 10 days and membership fee will be returned AT ONCE!

How can we break all record and tape club rules?

We are the only major record and tape club not OWNED...NOT CONTROLLED...NOT SUBSIDIZED by any record or tape manufacturer anywhere. Therefore, we are not obligated by company policy to push any one label. Nor are we prevented by distribution commitments from offering the very newest LPs and tapes.

Record Club of America—The World's Lowest Priced Record and Tape Club

Any 1 Tape or Cassette Shown Here Worth up to $20.94
For cartridges that can track as low as 0.1 gram

- Features all new Empire 990... world's most perfectly balanced playback arm.
- No acoustic feedback even when you turn up gain and bass.
- World's finest turntable motor—hysteresis synchronous type maintains speed accuracy with zero error.
- Lowest rumble of any turntable tested, 90dB (RLLL), wow and flutter, 0.1%.
- Exclusive pneumatic suspension lets you dance, jump or rock without bouncing the stylus off the record.
- Tone arm floats down or lifts up from a record surface bathed in light. Pick out the exact selection you want, even in a darkened room.

New Troubadour 598 record playback system
$199.95—less base and cover / walnut base and plexiglas cover—$34.95

EMPIRE

CIRCLE NO. 21 ON READER SERVICE CARD

BIASED
IN THE INTEREST OF BETTER SOUND

The new premium cassette tapes make any cassette recorder sound better. And the new Concord F-106E stereo cassette deck makes new tapes sound better. It's the first cassette deck to make true high fidelity recordings.

A Concord exclusive, Endmatic, provides complete automatic shutoff at the end of a cassette. The transport stops. The drive mechanism disengages — no chance of damage to the pinch roller.

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

At your Concord dealer, $1 9.79 (includes quality dynamic microphone, remote control, super dynamic cassette). Concord Electronics Corporation, 1935 Armacost Avenue, Los Angeles, California 90025/a subsidiary of Ehrenreich Photo-Optical Industries, Inc.

CIRCLE NO. 14 ON READER SERVICE CARD

because perceptive musicians and record executives decided that their music was worthy and unfortunately neglected by the public? In ten years of concert-going in the sophisticated Bay area of California, I've not heard a single Nielsen symphony at a concert. Yet I know most of them by heart, thanks to Columbia, RCA, and Turnabout.

STEPHEN R. WALDEE
Mountain View, Cal.

Zappa
I am a lover of rock music, and I would like to congratulate your reviewers, especially Noel Coppage, who commented on Frank Zappa's "Chunga's Revenge" in March. Zappa and the Mothers of Invention are the most underrated group on the rock scene today. To just see a review of a Zappa record is enough to please me, but to have reviewers with enough insight to appreciate this music is fantastic. I am really looking forward to a review of 200 Motels. And thanks to Noel Coppage for his witty remark that Zappa "out-Doors the Doors."

JEFF SALVIOLA
Franklin Square, N.Y.

Diana Ross
Diana Ross has always been one of the finest voices in show business, but I couldn't agree more with the comments made by Noel Coppage in the March tape section. Her potential is being wasted on a formula for hit-making that was designed when the Beatles were singing I Want to Hold Your Hand. Diana has the talent to make Barbra Streisand look like a jingle singer. She does not merely sing beautifully, she is also an excellent performer. It is true that Berry Gordy realized that his number one money-maker is fast becoming a queen of the golden oldies.

HERBERT SCHMIDLIN
Houston, Tex.

Tune Up, Please
In a review of Liszt piano works performed by Claudio Arrau in the December issue, Eric Salzman apologizes for his frequent adverse comments about piano recordings. Was he alluding to the fact that some pianos are not totally in tune? There can't be more than two or three pianos in the whole world that are in tune at any one particular moment. I sometimes think that piano tuners go home after work and listen to hard rock at a hundred and ten decibels to prepare themselves for the next day's work, and arrive at recording studios completely deaf to proper overtones. Then that slightly out-of-tune piano is recorded on noisy tape by a mixer who doesn't understand what microphone to use to get a proper sound, and the recording session is supervised by a producer who is actually a big fan of Sousa, Stan Kenton, or Orff. All of these factors help give Mr. Salzman an ulcer, and I must confess that I join him.

WILLIAM F. WAGNER
Sherman Oaks, Cal.

Addendum
Price changes for three of the automatic turntables in the Garrard line were received at this office too late for inclusion in Julian Hirsch's "Understand Your Record Player" (May). The Garrard SL-93B is now $139.50, the SL-72B $99.50, and the SL-55B $79.50. Also, the chart on pages 62 and 63 erroneously reported that the SL-55B does not have anti-skating compensation. The unit does have it.
NEW PRODUCTS
THE LATEST IN HIGH-FIDELITY EQUIPMENT

Marantz Model 250
Stereo Power Amplifier

- Marantz’s new Model 250 stereo power amplifier, the successor to the Model 16, offers an increase in power output with no change in price. Its continuous power rating is 125 watts per channel, both channels driven into 8 ohms, at any frequency from 20 to 20,000 Hz. At this output total harmonic and intermodulation distortion are both well under 0.1 per cent. Hum and noise are better than 106 dB below the full output. Built-in protective circuitry prevents damage to the amplifier and speakers under overdrive conditions and controls current surges when the amplifier is first turned on. Prominent on the front panel are two large VU meters that display the output levels of the stereo channels. Directly below each is a rotary switch for setting meter sensitivity (levels as low as 125 millivolts will register with the switch in the most sensitive position) and for turning the meters off. The Model 250 is 6⅞ inches high by 9⅞ inches deep; its width of 15⅞ inches permits rack mounting. Price: $495. A cabinet (shown) is $32.50 additional.

Circle 144 on reader service card

Belle Klipsch Speaker System

- Klipsch has introduced a new speaker system for home use that is as efficient as larger Klipsch systems although it is considerably smaller—34 inches high, 30 inches wide, and 19 inches deep. The three-way design, named the Belle Klipsch, is modeled on the La Scala theater system. It requires as little as 5 watts drive signal per channel, but has a power-handling capability of 100 watts program material. The 15-inch woofer, which works into a low-frequency folded horn, crosses over at 400 Hz to a large horn-type mid-range. A horn-loaded tweeter handles the frequencies above 6,000 Hz. Overall frequency response is 45 to 17,500 Hz ±5 dB. The system’s impedance is nominally 8 ohms. Unlike the larger Klipschorns, the Belle Klipsch does not require corner placement. The enclosure is of walnut, and a choice of about six grille-cloth styles is offered. Price: $815.

Circle 145 on reader service card

Pickering Phase IV
Phono Cartridges

- Pickering’s Phase IV series of phono cartridges consists of four models with low-mass stylus assemblies designed for use with various types of record players. The V-15 Phase IV AME (0.3 x 0.8-mil elliptical stylus) and AM (0.7-mil conical stylus) are recommended for light-tracking manual and automatic turntables. Both have a frequency response of 10 to 25,000 Hz and a nominal channel separation of 35 dB. Their outputs are 5.5 and 6 millivolts, respectively, referenced to a recorded velocity of 5.5 centimeters per second. They are intended to track at ¾ to 1⅛ grams (AME) and 1 to 3 grams (AM). The two other V-15 Phase IV models, the ATE and AT, are recommended for 2 to 4-gram tracking in less expensive automatic turntables. Frequency response for both is 10 to 23,000 Hz and separation is 32 dB. The ATE has a 0.4 x 0.8-mil elliptical stylus and an output of 6.5 millivolts. The AT’s stylus is a 0.7-mil conical type; its output is 8 millivolts. All the Phase IV cartridges are fitted with pivoted record brushes that sweep the grooves ahead of the stylus, and are supplied with a snap-in cartridge mount for simplified installation. Prices: AME, $49.95; AM, $34.95; ATE, $39.95; AT, $29.95.

Circle 146 on reader service card

Roberts GH-500D Stereo Tape Deck

- Roberts’ newest open-reel three-head stereo tape deck, the Model GH-500D, uses recording and playback heads constructed of glass and crystal ferrite to resist wear. The solenoid-controlled three-motor transport operates at speeds of ¾, 3⅞, and ⅞½ ips, with 15 ips obtainable by means of a capstan bushing. Frequency-response specifications are 30 to 28,000 Hz ±3 dB (7⅛ ips), 30 to 20,000 Hz ±3 dB (3⅞½ ips), and 40 to 9,000 Hz ±4 dB (⅞½ ips). Corresponding wow-and-flutter percentages are under 0.1, 0.2, and 0.25, respectively. The signal-to-noise ratio is better than 50 dB.

The quarter-track GH-500D is a two-direction machine in playback, reversing automatically at any point on a tape that is preselected on a calibrated dial or marked by a strip of sensing foil applied to the tape. The single playback head shifts to scan the proper tracks when the playing direction changes. An automatic end-of-tape shutoff can be switched in or out, or can be an adjustable automatic recording-level control. The transport functions include a PAUSE/EDIT pushbutton that is threaded to accept a camera shutter-release for remote operation. Another pushbutton changes the recording characteristics of the deck for low-noise, high-output tape types, and a tape-tension selector has positions for ⅜⅞, 1-, and 1⅞½-mil.

(Continued on page 20)
tapes. The fast-forward/rewind time for 1,200 feet of tape is 60 seconds. Sound-on-sound switching facilities are located on the front panel, as is a stereo-headphone jack (with volume control) that will drive 8-ohm phones. The walnut-encased Roberts GH-500D tape deck measures 18 1/2 x 16 1/4 x 11 1/2 inches and weighs 50 pounds. Price: $699.95.

Circle 147 on reader service card

Fisher 502
Automatic Turntable

- Fisher's new Model 502 heads a recently introduced line of three automatic turntables, all of which offer 33 1/3, 45, and 78-rpm operation with speeds adjustable over a range of ±3 per cent. The 502's 7.1-pound platter is driven by a four-pole induction motor with less than 0.1 per cent wow and flutter and -43 dB rumble. A stack of up to eight discs can be played automatically with shutoff after the last disc, or any disc in the stack can be repeated until the cycle is interrupted by the user. Sensing mechanisms built into the platter and motorboard cue the tone arm for records of 7, 10, and 12-inch diameters or prevent the arm from leaving its rest when there is no disc on the platter. Tone-arm tracking and anti-skating force are applied simultaneously by a calibrated dial; a second knob provides final adjustment of anti-skating compensation for the type of stylus (conical or elliptical) used. Vertical tracking angle is also adjustable by means of a cartridge-tilting mechanism in the tone-arm shell with optimum positions indicated for single-play operation or for any disc in a stack of eight. A lever-operated damped cueing mechanism is provided. Dimensions of the 502, exclusive of base, are approximately 14 1/4 x 12 1/2 inches. Clearances of about 5 inches above and 3 1/2 inches below the mounting board are required. Price: $149.95; base, $17.95; dust cover, $19.95; or an integrated base-and-dust cover is available optionally at $24.95.

The other two models in the Fisher line, the 402 and 302, cost $129.95 and $99.95, respectively.

Circle 148 on reader service card

Pilot PTD-100
Stereo Cassette Deck

- Pilot's new stereo cassette deck, the PTD-100, has a frequency response of 30 to 15,000, 0.2 per cent wow and flutter, and a signal-to-noise ratio of 45 dB. The transport controls consist of six push keys, among them a pause control and a stop key that ejects the cassette when fully depressed. Recording levels, adjustable for each channel by means of two slider controls, appear on two level meters at the left of the transport. The slider controls can also be used to set playback levels. A pushbutton-activated automatic-level-control circuit prevents tape overload on peak recording levels and also provides a fixed playback level when the deck is used in that mode. The PTD-100 has an automatic-shutoff function. After a cassette has begun to play, the power switch can be put to the off position; the deck will then play the cassette all the way through and turn itself off automatically, disengaging the drive mechanism. In addition to front-panel microphone and stereo-headphone jacks, the PTD-100 has the usual line inputs and outputs, the latter adjustable over a range of approximately 0.5 to 0.05 volt by means of a three-position switch on the rear panel. The bias-signal frequency is 100 kHz; the erase circuit reduces the level on the tape to -60 dB or less. On its walnut-veneer base the Pilot PTD-100 deck has dimensions of 12 1/2 x 3 3/4 x 9 inches. Price: $169.95.

Circle 149 on reader service card

Harman-Kardon
Citation Thirteen Speaker

- Harman-Kardon's latest addition to its Citation line of components is the Citation Thirteen speaker system, a floor-standing omnidirectional design with all drivers mounted 14 degrees from the horizontal so that they project partially toward the listener but principally toward the ceiling. The system has three direct-radiating 7-inch woofers installed in a dual-cavity enclosure, the chambers of which are tuned an octave apart. A 1 1/2-inch dome mid-range and two 1-inch dome tweeters handle frequencies above 2,500 and 7,500 Hz, respectively. There are separate level controls for these drivers at the rear of the enclosure, with position for flat response indicated. Power-handling capability is 60 watts per channel continuous, with 30 watts per channel the recommended minimum power for each speaker. The frequency response of the system is 30 to 20,000 Hz ±2.5 dB, and the nominal impedance is 8 ohms. The system inputs are fused to prevent damage from overdrive. The enclosure of the Citation Thirteen is of 1-inch particle board finished in walnut. Dimensions are 19 1/2 inches wide by 14 1/2 inches deep by 28 inches high. A choice of seven different grille-cloth styles is offered. Price: $295.

Circle 150 on reader service card
Out of the Research that Produced the 901

BOSE brings you the Second DIRECT/REFLECTING® Speaker System

THE 12 YEARS OF RESEARCH
Twelve years of research into physical acoustics and psychoacoustics produced this unconventional speaker that has met with unprecedented success. Copies of the Audio Engineering Society paper, by Dr. A. G. Bose, describing this research, are available from BOSE Corp. for fifty cents.

THE RAVE REVIEWS
The 901 is the most highly reviewed speaker on the market, regardless of size or price. Circle number 10 on your reader service card for reprints of the reviews.

THE SOUND OF THE 901
Ask your franchised BOSE dealer for an A-B comparison with the best conventional speakers he carries, regardless of their size or price. You will only appreciate why we make this request after you have made the experiment.

“You can hear the difference now.”

BOSE
Natick, Massachusetts 01760
ALLIED RADIO SHACK ISSUES A NEW AND DIFFERENT CATALOG!

ELECTRONICS FROM A-Z
ANTENNAS BATTERIES CAPACITORS DIODS EDUCATIONAL KITS FIBER OPTICS GRILLE CLOTH HI-FI SPEAKERS IC'S JACKS KNOBS L-PADS MIKES NEEDLES OSCILLOSCOPES P-BOXES QUADRACS RESISTORS SEMICONDUCTORS TELEPHONES ULTRASONIC ALARMS WIRE XENON STROBE LIGHT "Y" ADAPTERS ZENER DIODES AND MUCH MORE!

1000'S OF ITEMS, 100'S OF EXCLUSIVES!
PREVIEWS OUR COMPLETE SCIENCE FAIR® AND KNIGHT-KIT® LINES FOR '72!

a valuable "FIRST EDITION" ...and it's FREE!

The new buying Guide for kit builders, Hams, hobbyists, do-it-yourselfers, "fix-it men"! Lists thousands of handy and wanted "little things" most stores don't stock. Like tubes and transistors, cables and plugs, adapters and antennas—you name it—the things that keep equipment working. Or make it work even better. Or DO MORE. If you own anything electronic or electrical, you need this catalog!

950 STORES NATIONWIDE! EVERYTHING IN THIS BOOK AVAILABLE FAST & EASY!

INSIDE THE AMPLIFIER

OBVIOUS though it may be to some, it's worth stating explicitly that audio amplifiers do not themselves generate the power they dispense to speakers. Amplifiers should be thought of as power processors or controllers, and their specifications actually refer to the amount of audio power they can process without significantly distorting the audio signal. But the real source of the power is the a.c. wall socket that the amplifier is plugged into—in other words, the local electric light and power company.

For efficient transmission, the power company's generators are designed to produce alternating current (a.c.). By agreement, the speed of electric generators in the United States is carefully regulated for 60 back-and-forth current alternations per second (60 Hz) since many electrical appliances—your turntable, for example—have their speeds established by the a.c. cycling rate. In its raw form, this alternating current is not suitable for use by an amplifier. The alternations would be heard as a very loud low-pitched hum drowning out whatever electrical music signal was also being processed by the amplifier.

The a.c. power must be converted (rectified is the technical term) to d.c. power such as is supplied by a battery, and held ready to meet the ever-changing power demands the music makes upon the amplifier.

The amplifier's power supply converts the 60-Hz current to a quiescent body of power in reserve. You can look upon the supply section as the equivalent of a municipal reservoir system that gathers water from a swift-flowing river, purifies it, and then stores it for later distribution as the need arises. If the reservoir does its job well it will always have enough in reserve for any contingency. But if its capacity is too small and the demands made upon it too great, it will empty more quickly than the river is able to refill it. Then all the river's turbulence and impurities will come through unchecked, there having been no storage time during which they could be processed out.

To continue this approximate analogy, most of the rest of the amplifier represents the water faucets the reservoir supplies. Like a householder's need for water, the amplifier's need for power is not constant, but varies according to the demands of the music and the level of loudness at which you choose to reproduce it. The amplifier's electrical faucets—the transistors or vacuum tubes (which are appropriately called "valves" in England)—stand between the power supply and the speakers. The tiny audio signal from your record player, tuner, or tape machine acts upon these parts to regulate the flow of power to the speakers just as the small effort of your hand turning a tap controls the flow from a faucet. By twisting the tap back and forth you can alter the strength of the flow (which corresponds to loudness or amplitude) and the rate at which it changes (which corresponds to frequency). The audio signal's effect upon the amplifier is much the same, although its fluctuations are much more rapid than the hand's movement. And instead of water, the amplifier releases a precise replica of the electrical audio signal, but much increased in strength.
There are several components on the market that you can take home and get true 4-channel sound out of today. All are expensive. Except ours. We call ours QAUDIO.* It's an amplifier and player with 4 discrete channels. And we designed it primarily to play the new 8-track 4-channel cartridges.

But we also give it the capability of playing ordinary 8-track stereo cartridges, because there are a lot more of them around today than there are 4-channel cartridges. And QAUDIO makes even ordinary stereo cartridges sound fuller and richer than they ever have before.

But of course it takes a specially recorded 4-channel cartridge to give you the real QAUDIO experience, and there's no point in trying to describe what that's like. It's simply something that has to be experienced.

And you can experience it today. QAUDIO is available now... and at a price that's almost as unbelievable as the sound: $169.95. (That's $169.95 for a true 4-channel amplifier-player with 80 watts of total music power.) A QAUDIO unit for your car/boat is just $129.95.

We'll be happy to send you the names of dealers near you demonstrating QAUDIO, together with a brochure describing it in detail.

Write to Toyo Radio Company of America, Inc., 1842B West 169th Street, Gardena, Calif. 90247.

*PRONOUNCED "KAAH DIO". THE NAME QAUDIO IS HAYED ON THE GENERIC "QUADRIPHONIC".

CIRCLE NO. 50 ON READER SERVICE CARD
The cassette revolution threw the industry a wild equalization curve. We fielded it.

With a bias-equalization circuit that lets your TEAC A-24 stereo cassette deck record and playback the most advanced low-noise, high-output tapes with crystal clarity. But then, being on the leading edge of tape technology is a way of life at TEAC.

Sure, we could have joined the club and traded on the novelty, rushing out anything that could play a cassette. Instead, we started right on the drawing board to bring you the finest deck we could devise. Five years later, here it is—the consummate cassette deck.

With these fine features: input selector for easy access to live programming, tuners, line sources or existing stereo systems. Auto-stop that disengages the drive mechanism at the end of tape to preserve the life of precious tapes and precision components. Wow-and flutter-free hysteresis-synchronous outer-rotor motor. Foolproof piano-key controls. Advanced solid-state, low-noise circuitry, life like frequency response and signal-to-noise specs.

All this too rich for your blood? You can have the same fine deck without the embellishments of input selection and auto-stop at a price attractively below that of the A-24. It's all there in the standard-tape A-23.

Comes the next revolution, you'll be well armed with either one of these outstanding TEACs.
TESTING PORTABLE FM RADIOS: For the music lover, the basic requirements for a portable FM radio are much the same as for a permanent home listening installation: the ability to receive FM stations of widely differing signal strength without interference or distortion, to play at an adequate volume level without objectionable distortion, and to have a reasonably wide and uniform frequency response. Elsewhere in this issue there is an extended article on portable FM radios detailing our findings on a number of samples we solicited for testing. We gave a great deal of thought to the best way of handling an evaluation program, and decided that it was necessary to depart considerably from our customary procedures since with FM radios we were concerned only with the quality of the audio that came out of their speakers for a given FM signal reaching their antennas.

For our tests, we used our FM signal generator to set up what was, in effect, a miniature broadcast station, with its signal strength and modulation under our control. Each radio was placed eight feet from our transmitting antenna, with its own whip antenna fully extended. The output from the radio speaker (a 400-Hz tone) was picked up by a microphone located two feet in front of the radio and was measured with a meter and oscilloscope. All tests were made at a broadcast frequency of approximately 90 MHz, which in our area is free of interfering commercial signals. None of the measurement data can be correlated directly with our conventional tests of component tuners, amplifiers, or loudspeakers. Our purpose was to compare the overall performance of the radios rather than to make absolute measurements that would be of little practical value to a consumer.

The FM reception performance of the radios was tested by several procedures. To determine relative sensitivity, we slowly turned up the generator's r.f. output level until the point was reached at which there was no further increase in the radio's audio-output level. This established the signal level required for full limiting. We then reduced the generator output to determine the point at which the audio output dropped 1 dB from its maximum. This roughly established the shape of the limiting curve, which is important in respect to how quiet the reception is for a given signal strength above the tuner's sensitivity figure. In other words, given two tuners, each with a measured sensitivity of 2 microvolts, the one with the steeper limiting curve will be quieter (i.e., will have less background hiss) with a 5-, 10-, or 50-microvolt input signal.

We also simulated the "flutter" caused by passing aircraft by amplitude modulating our FM signal to a depth of 80 per cent at a 5-Hz rate and noting the signal level at which flutter could be detected. Since this factor is closely related to the limiting capability of the radio, it was no surprise to find that the higher the sensitivity, the greater the immunity to flutter.

We made a rough check of capture ratio (the ability to receive only the stronger of two stations on the same frequency) by tuning the radio to a broadcast station and tuning our signal generator to the same frequency. We adjusted the generator level until the 400-Hz tone could barely be heard, then increased it until the broadcast program was completely obliterated by the test tone. The ratio of the two signal levels is indicative of the capture ratio of the receiver.

Selectivity (the ability to adequately separate a station from other nearby stations) was checked by establishing a reference audio output (using a signal level well below the limiting point), detuning the signal exactly 400 kHz to simulate an alternate-channel station, and increasing the r.f. level until the original reference audio output level was obtained. Although this is not a standard method, it adequately established the relative performance of the radios. This test was made with the signal detuned both
above and below the original frequency; where the two conditions yielded different results (as was the usual case), the poorer of the two figures was used.

Image rejection refers to a radio's insensitivity to aircraft-radio transmissions. This is an important factor only if you will be using the set near a major airport or flight path. Image rejection was measured by establishing a reference output at 90 MHz, then tuning the generator to 111.4 MHz (the image frequency) and increasing its output until the original output was obtained. For various reasons, this technique did not provide a true image-rejection ratio; however, since all the radios were tested under identical conditions, valid comparisons could be made. The accuracy of dial calibration was measured, although the infrequent calibration intervals and wide dial pointers made this an academic consideration in most cases.

The maximum audio output of each radio was measured with a Scott sound-level meter 12 inches in front of its speaker. The volume of the broadcast test signal was increased until the acoustic waveform picked up by our test microphone and viewed on an oscilloscope showed a sudden increase in distortion. (This is analogous to the "clipping level" of an amplifier.) Here, too, the absolute sound level at the distortion point is of minor importance, but the differences are significant.

Current drain from the radio's batteries was measured both at minimum volume and when delivering its maximum "undistorted" output as determined by the test described above. To estimate the cost of operating the radios on batteries, several arbitrary conditions were established. It was assumed that the radio would be operated for 2 hours a day, in one continuous listening session. The average battery drain was assumed to be the geometric mean between the no-signal and maximum-signal conditions.

The battery manufacturer's ratings for useful life (to the point where the original 1.56 volts per cell had dropped to 1.2 volts) at the assumed current were used to estimate the battery life in hours, which was converted to the cost of operation in cents per hour. In most cases, the radios would continue to function, with reduced volume and more distortion, when the battery voltage was low.

Finally, a critical listening comparison was made taking the radios two at a time. By tuning in very weak stations, we were able to make fairly unambiguous determinations of relative sensitivity. The comparative audio quality and frequency response, at moderate and high volume levels, was easily determined in the same manner. The better unit of each pair was then compared with another model (in a manner similar to drag racing elimination heats) until we had finally ranked all the radios in an estimated order of overall sound quality.

When testing high-fidelity components, we rarely (if ever) attempt to rank competitive units in order of merit. There are too many factors (including individual preferences) involved to make such a procedure possible. However, we were pleasantly surprised to find no such problem with the portable FM radios. In several cases, the difference between units was small and they were therefore grouped together in the ratings. In others, there was no doubt where a particular model ranked.

It must be emphasized that this ranking was based solely on a listening evaluation—in other words, how many stations could be picked up and how good they sounded. Examination of the tabular data listing shows a large variation in such factors as battery operating cost, frequency bands available, size, and price. None of these were considered in ranking the sets, but any of them might have a strong influence on your own choice.

---

**Fisher 701 Four-Channel AM/FM Receiver**

- The Fisher 701 is the first (and, at this time, the only) four-channel receiver. Although no larger than many other deluxe receivers (17 inches wide, 16½ inches deep, and 5½ inches high), it contains AM and stereo FM tuners and two complete independent stereo amplifiers, with extensive control facilities. The available modes of operation include mono, two-channel stereo with two or four speakers, four-channel stereo (with an appropriate program source), and a few other variations which we will describe further on.

The FM tuner, with a rated IHF sensitivity of 1.7 microvolts, has the "Autoscan" electronic tuning featured on some other Fisher receivers. The FM band can be scanned automatically, or the tuning can be advanced one station at a time, by pushing buttons on the front panel of the receiver. Alternatively, a small hand-held remote control at the end of a 20-foot cable can be used. Normal manual tuning, of course, is also provided. The tuning meter serves as a rough station indicator when using Autoscan, with a special scale calibrated from 88 to 108 MHz.

(Continued on page 28)
ZERO 100 is the newest, most advanced automatic turntable. The name stands for Zero Tracking Error—up to 160 times less than with any conventional tone arm—new freedom from distortion—new life for your records. This revolutionary Garrard unit, priced at $189.50, was introduced with a special presentation booklet, bound into the June issue of this magazine. There are 12 explanatory pages, with clear illustrations and diagrams, valuable to anyone interested in fine record playing equipment. If you missed the insert last month, or would like a better copy, we'll be glad to send you one. The coupon is for your convenience.
Each of the four audio channels is rated at 40 watts continuous power output into 8-ohm loads. The total music power rating of the receiver is 250 watts. Available power is considerably less into either 4- or 16-ohm loads.

Although the front panel of the Fisher 701 appears only slightly more "busy" than that of any good two-channel receiver, it contains almost twice as many control functions. The tone and balance controls are concentric types, with the outer knob controlling the rear speakers and the inner knob the front speakers. Volume is regulated by two horizontal slider controls (one above the other) for the front and rear speakers. They are easily operated together or can be individually set as required.

The tape-monitor switch can be used with a two-channel or four-channel tape recorder in the usual manner for playback or monitoring from the tape while recording. In addition, there are provisions for playing two-channel tapes through either the front or rear speakers, with the other pair of speakers handling a separate program under the control of the receiver's input-selector switch. This has positions for PHONO, FM, AM, and two high-level AUX sources. The MODE switch carries the usual MONO and 2 CH STEREO positions, plus 4 CH STEREO and a reversed 4 CH STEREO mode. The latter transposes the right-front and left-rear program channels, if that should be needed. Finally, there is a 2+2 CH mode, which is fundamentally similar to the 2 CH STEREO mode, but is intended for use when normal stereo programs are to be played through four speakers. It is not a matrixing or difference-signal system, since the front and rear speakers on each side of the room carry exactly the same information, but at different levels in the 2+2 CH mode. Whatever four-channel or ambiance effect is heard in the 2+2 mode is dependent upon the listener's being at the proper distance from the rear-channel speakers.

The speaker-selector switch, which also controls the a.c. power to the receiver, can energize the four main speakers, four remote speakers, or all eight simultaneously. All speakers can be switched off for headphone listening. The front-panel headphone jack, which is always energized, carries a mixed front-and-rear program when a four-channel signal source is used.

High-cut filtering and loudness compensation are separately controlled for front and rear speakers by four pushbuttons. Another button activates the FM interstation-noise muting circuit. Below the two volume sliders are the three Autoturn pushbuttons—one to switch on the circuit, the others for continuous or one-station advance. Finally, there is an AFC on/off pushbutton.

As might be expected, the rear panel of the Fisher 701 is impressive with its profusion of inputs and outputs. There are four jacks for each of the auxiliary sources and four tape outputs plus four tape inputs plus the usual pair of phono inputs. There are no less than sixteen spring-loaded clip-type speaker terminals for the eight speakers that can be driven from this receiver. Also on the rear panel are the two switched a.c. outlets and the five-pin DIN connector for the remote-control Autoscan cable. The Fisher 701 receiver is priced at $699.95. An optional walnut cabinet is available for $22.95.

Laboratory Measurements. The FM tuner of the Fisher 701 met or surpassed all of its specifications, within the limits of our test-equipment capability. The IHF sensitivity was 1.6 microvolts, and stereo separation exceeded 30 dB. Laboratory Measurements. The FM tuner of the Fisher 701 met or surpassed all of its specifications, within the limits of our test-equipment capability. The IHF sensitivity was 1.6 microvolts, and stereo separation exceeded 30 dB. Limiting was complete at 5 microvolts or less, and the measured distortion with full signal was 0.76 per cent.

The use of AFC (automatic frequency control) in the Fisher 701 is a by-product of the electronic-tuning Autoscan system. Instead of the usual multi-section mechanical tuning capacitor, the tuner section has silicon diodes whose capacitance is controlled by an applied d.c. voltage. The tuning knob actually turns a potentiometer to control the "tuning" voltage, which is varied electronically for the Autoscan mode. Because of the diode tuning arrangement, there is a noticeable tuning drift during warmup. It is imperative, therefore, to tune in a station with the AFC off, then to lock it in by depressing the AFC button. We find this procedure, recommended in the receiver's instruction manual, an inconvenience.

The AM section sounded quite good, with somewhat better frequency response than most we have tested lately. The response was down 6 dB at 30 Hz and 15.5 dB at 15,000 Hz. Limiting was complete at 5 microvolts or less, and the measured distortion with full signal was 0.76 per cent.

The use of AFC (automatic frequency control) in the Fisher 701 is a by-product of the electronic-tuning Autoscan system. Instead of the usual multi-section mechanical tuning capacitor, the tuner section has silicon diodes whose capacitance is controlled by an applied d.c. voltage. The tuning knob actually turns a potentiometer to control the "tuning" voltage, which is varied electronically for the Autoscan mode. Because of the diode tuning arrangements, there is a noticeable tuning drift during warmup. It is imperative, therefore, to tune in a station with the AFC off, then to lock it in by depressing the AFC button. We find this procedure, recommended in the receiver's instruction manual, an inconvenience.

The AM section sounded quite good, with somewhat better frequency response than most we have tested lately. The response was down 6 dB at 30 Hz and 4,600 Hz, referenced to the mid-band level.

The tone controls and loudness compensation had fairly conventional characteristics, with the latter boosting highs.
What is the most expensive component in your stereo system?

Wrong.
Assuming that you picked one of the component types pictured here.
Although these three components form the typical stereo system, no system is actually complete without number four: records.
And no matter what you may have paid for your receiver, speakers, or turntable, chances are you've spent even more for your records. Or will before long.
Your records are not only your biggest investment, but the most vulnerable as well. They can remain as good as new for years or begin to wear the first time they're played. In which case they become even more expensive.

How to protect your investment.

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

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

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

How the Dual does it.

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

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

Also, the longer the tonearm, the lower the tracking error. Thus, the 1219's arm, 8¾" from pivot to stylus, is the longest of all automatic arms.

Other things to consider.

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

The professionals' choice.

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

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

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

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

You'll find Dual turntables priced from $99.50. It's not the least you can spend. But when you consider your investment in records, you may agree that it's the least you should spend.

The Fisher 701's rear panel is complex but well laid out. The small socket to the left of the speaker terminals is for the remote-control tuning unit. Two a.c. convenience outlets are provided.

as well as lows at low volume settings. The high-cut filters, which had a 12-dB-per-octave slope above 4,500 Hz, were excellent. RIAA phono equalization was accurate within ±2 dB from 30 to 15,000 Hz.

Fisher informs us that the 701's power-amplifier ratings are valid with any two channels driven simultaneously. This is reasonable, since the probability of all four channels being driven to full power simultaneously and in phase is very remote, and the power supply would have to have far greater capacity (and be far costlier) if the receiver had to cope with this unlikely situation. At the clipping point, we measured 52 watts per channel (at 1,000 Hz), with two channels driven into 8-ohm loads. To judge how the 701 might perform with a simultaneous reasonably high-level rear-channel signal, we drove the rear channels to half power while the front channels operated at full power output. In this condition, the front channels clipped at 47.5 watts per channel, at which time the rear channels were each delivering 24 watts of undistorted power. With a continuous power capability well in excess of 145 watts, the Fisher 701 certainly rates as a heavyweight among stereo receivers.

With 16-ohm loads, the output power at clipping was about 30 watts per channel, and distortion remained low up to the clipping point. However, with 4-ohm loads, the distortion tended to rise at low output-power levels. We judged that the maximum power that could be delivered to 4-ohm speaker loads with reasonable distortion was about 20 watts per channel, and even at 10-watts output, the distortion level was somewhat higher than we measured with 8-ohm loads. Clearly the Fisher 701, while a real "power-house" when driving 8-ohm speakers, is not at its best with 4-ohm speakers—which are usually low-efficiency types. Fisher's instructions caution against using any combination of main and remote speakers whose total impedance is less than 4 ohms, but does not specifically rule out the use of 4-ohm speakers. We would.

We noted that the audio gain of the Fisher 701 changed markedly in different operating modes. The input signal required to drive the amplifiers to 10 watts per channel in the 4 CH mode was 90 millivolts (aux) or 1.3 millivolts (phono). Phono overload occurred at about 52 millivolts, which makes the 701 compatible with most high-quality low- or medium-output cartridges (those delivering less than 5 or 6 millivolts in our cartridge tests). Hum and noise were extremely low on all inputs, between -68 and -72 dB referred to 10 watts output.

**Comments.** It is almost impossible, in the available space, to do justice to the fantastic versatility of the Fisher 701 receiver. Aside from its normal four-channel stereo capability, consider a few of its other possible modes of operation. It can drive two separate four-channel speaker installations, or four speakers in the main listening room and two additional speakers in each of two other rooms, or two speakers in each of four rooms—with full two-channel stereo in each room and independent control of volume levels and balance, and partially independent tone control and filter actions. It doesn't take much imagination to see the Fisher 701 as a true control center for a home-wide entertainment system. This is especially true since a two-channel tape-recorded program and any of the receiver's other program sources can be independently channeled to different rooms.

A possible hazard of this type of operation is the tendency of the Fisher 701 to get unusually warm for a solid-state receiver. We would expect this to occur during our tests at full power, but after periods of listening at moderate levels we occasionally found the output transistor heat sinks uncomfortably hot to the touch. Fisher suggests using a fan to cool the receiver (this is a must if the receiver is installed vertically), and we would emphatically endorse this procedure if more than four speakers are to be driven. However, we were primarily concerned with the use of the 701 in a single room. Considered as a conventional stereo receiver, it performed and sounded first-rate, and needs no further comment.

We have mixed feelings about the action of the muting and meter-circuit response. There is a distinct time lag in the muting circuit, necessitating very slow tuning if one is not to miss a station entirely. However, the muting action is ideal, with no thumps or noise bursts. Although the Autoscan system functioned as intended, with total silence between stations, the only way we could identify a station with any certainty was to wait for an announcement, since the Autoscan meter scale (which is not readable more than a couple of feet away in any event) is only approximately calibrated.

As for the 2+2 CH mode, we found a minor enhancement of ambiance when using it on normal stereo material. However, the Fisher 701 does have a unique capability not mentioned in its instruction manual. By connecting a single rear speaker (or two of them in series with opposite phasing) across the hot terminals of the rear-channel speaker outputs, you can obtain a "difference" signal that, in a surprising number of cases, adds a worthwhile ambiance to two-channel programs. (See Ralph Hodges' article "Multichannel Listening" in the April 1971 issue for details.) When the difference signal is fed to the rear channels, the Fisher 701 permits completely independent level and balance adjustments for the front and rear speakers. Nothing could be more convenient, and it works to perfection. When true four-channel programs are available (in whatever format), it is certain that the 701 will be able to utilize them, but in the meantime you can enjoy truly enhanced two-channel stereo from records, tape, or FM radio. Overall, Fisher engineers have done a remarkable job of design and packaging in the 701: it is certainly unmatched for versatility, and its performance easily meets contemporary standards for high-quality stereo receivers.

*For more information, circle 156 on reader service card*
This new receiver cleans your signal, without cleaning out your bank account

It's a dirty world out there. And even though an FM station transmits a clean signal, by the time it reaches your house, it may be mixed up with 20 or so other signals, and some interference sources, many of them strong enough to swamp the signal you want to hear. The new Sony 6045 FM stereo/FM-AM receiver spares no detail to deliver a clean signal to your speakers.

Its FM front end uses passive r.f. circuitry, so that those strong, but undesired signals can't overload the input, to swamp your station or to pop up at several random places on the dial. (The passive input stage can't generate any hiss, either). By the time the signal does reach an active stage, most of the undesired signals have been shorn away—and since that stage is an FET, it's virtually immune to overloading anyway.

Six solid-state i.f. filters clean the signal even further. They combine uniform response over the entire FM channel with almost complete attenuation everywhere else. You can pluck the station from a host of stronger ones or adjacent frequencies. And solid-state i.f.'s never need realignment. Together, these ideally-matched FM circuits provide:

- 2.6 uV (IHF) sensitivity
- 70 dB signal-to-noise ratio
- 80 dB of selectivity
- 100 dB of spurious signal rejection
- A capture ratio of 1.5 dB—all at a total harmonic distortion of only 0.4%

Cleanliness doesn't stop at the 6045's tuner stage. Its amplifier uses the same dual-power-supply, direct-coupled approach as our more expensive amplifiers and receivers, so there's no coupling capacitor to stand between you and the music. The 6045 gives you the best sound your speaker is capable of, because you get the full damping factor at all frequencies, and perfect transfer of all 75 watts dynamic power output at only 0.5% distortion. Noise at full output is a miniscule 0.13 millionths of a watt, virtually inaudible. Still, no matter how clean the receiver's circuits, some stations still put out a dirty signal, some records are worn or scratched and some tapes have hiss. The 6045 has an answer for that one, too: a high filter that cleans such signals up.

Price is not a dirty word either, $229.50**, which, in this day of rising prices, is just clean miraculous. Sony Corporation of America, 47-47 Van Dam St., Long Island City, New York 11101.

SONY® 6045

*IHF standard constant supply method at 8 ohms. **Suggested retail price.
Garrard's new top-of-the-line automatic turntable, the Zero 100, features a novel articulated tone arm designed for zero lateral tracking error. The tone arm's cartridge head is pivoted in the horizontal plane, and a separate link-age, parallel to the stainless steel tone-arm shaft, constantly changes its offset angle as it moves over the record surface. Garrard claims the arm has a maximum tracking-angle error of only 90 seconds, which is 1/40 of a degree! This is far lower than can be achieved by any conventional pivoted tone arm, and Garrard's use of precision-loaded ball bearings appears to have eliminated problems of pivot play and friction that have troubled similar designs.

In other details also, the arm of the Zero 100 differs from that found on competing automatic turntables. Anti-skating correction is applied by two ceramic disc magnets. The repulsion between the like poles of the magnets applies an outward torque to the arm that is adjusted by a sliding magnetic shield. The shield position is indicated on a dual calibrated scale, marked to match the stylus force from 0 to 5 grams for conical styli and from 0 to 2 grams for elliptical styli. The arm is balanced by an elastically isolated rotatable brass counterweight. Tracking force is set by a separate sliding brass weight on the arm, whose scale is calibrated from 0 to 3 grams in 1/4-gram intervals. No springs are used anywhere on the arm. The slide-in cartridge-mounting plate has an overhang adjustment, with a separate plastic jig for accurate positioning of the stylus. A two-position lever on the front of the cartridge head tilts the cartridge to set the vertical tracking angle for a single record or for the center of a full six-record stack. The tone-arm rest post has a built-in lock, spring-loaded so that attempting to lift the locked arm cannot cause damage.

The 11 1/2-inch cast-aluminum platter is driven by a Synchro-Lab constant-speed motor at 33⅓ or 45 rpm. As on the Garrard SL-95B, the playing-speed control of the Zero 100 also sets the arm indexing point for 7-, 10-, and 12-inch records at 33⅓ rpm and for 7-inch records at 45 rpm. A record of any size can be played manually at either speed, of course. The platter is covered with a ribbed, matte-surface rubber mat. There are removable automatic and single-spindle supports (the latter rotates with the record), and a single edge-support post for the record stack in automatic operation. Three levers control all operating functions: automatic start/stop, manual start/stop, and cueing. This last operates with a slightly damped lift and a slow, smooth descent that is totally free of lateral drift.

The vernier speed-adjustment control is a ring concentric with the speed selector. The nominal range is ±2.5 per cent at 45 rpm and ±3.5 per cent at 33⅓ rpm. Illuminated stroboscope markings under the platter are continuously visible through a window on the motorboard during play. The Garrard Zero 100 is $189.50. A molded plastic base and a dust cover are available for $6.50 each.

Laboratory Measurements. The articulated tone arm of the Garrard Zero 100 lived up to the claims made for it, insofar as we could measure its performance. The limiting angular resolution of our tracking-error protractor is about 0.5 degree, and at no time did we find an error larger than that. Without a doubt, the tracking error of the Zero 100 has been reduced below ordinary measurable limits—and it is certainly far less than the inherent errors involved in cartridge mounting.

The arm showed no sign of resonances or other side effects from its unusual construction. The tracking-force calibration was accurate within 0.1 gram over its full range. The force increased by about 0.2 gram over a stack of six records when initially set for a single record. This is typical of the better automatic turntables we have tested. We were pleased to see that Garrard's anti-skating correction, unlike that on most arms, was approximately correct when set for the tracking force in use. One would expect the automatic reduction in head-offset angle toward the inner grooves of the record to require less anti-skating compensation. Perhaps the wedge-shaped magnetic shield achieved this result; at any rate, the correction was equally accurate over the entire record.

The turntable started rapidly at line voltages as low as 70 volts, and its speed was absolutely stable and unaffected by changes in line voltage or load. The vernier speed adjustment had a range of about ±3 per cent. The Zero 100 measured well: wow and flutter were 0.1 and 0.025 per cent at 33⅓ rpm, and 0.13 and 0.05 per cent at 45 rpm. Unweighted rumble was -32 dB, decreasing to -35 dB when the two channels were paralleled to cancel vertical rumble. With CBS RRL weighting, the rumble was -55.5 dB, one of the lower figures we have obtained since we started making weighted measurements.

Comments. Despite its unconventional design (or perhaps because of it), the Garrard Zero 100 was very easy to get used to. In particular, the finger lift (a straightforward extension of the main arm) was exceptionally convenient and frictionless. With the two channels paralleled to cancel vertical rumble. With CBS RRL weighting, the rumble was -55.5 dB, one of the lower figures we have obtained since we started making weighted measurements.

It appears to us that the Zero 100 was designed, first and foremost, as a single-record player, and only secondarily as a changer. Only 12-inch records (six of them) can be played automatically, since the changer's record-edge support post is fixed for that size. Ten-inch LP records are not common, but it is well to be aware of this limitation.

Obviously, the Zero 100 was designed to be used with the best cartridges. Its maximum tracking force of 3 grams, or 2 grams with elliptical stylus, would rule out most low- or medium-price cartridges.

Garrard's Zero 100, in basic performance, easily ranks with the finest automatic turntables on the market. Its novel arm—which really works as claimed—and its other unique design features suggest that a great deal of development time, plus sheer imagination, went into its creation. In our view, the results were well worth the effort.

For more information, circle 157 on reader service card (Continued on page 34)
The $95 Misunderstanding.

It seems there's been some confusion about the price that appeared in our first ad for the new KLH Model Thirty-Two loudspeakers. To clear up any misunderstanding, the price is, indeed, $95 the pair ($47.50 each). If you're wondering how we could make a KLH loudspeaker for $47.50, it's really quite simple. We had two choices.

Either we could make a fair speaker and a lot of profit. Or we could make a lot of speaker and a fair profit. We chose the latter. We always do. That's why KLH speakers sound like KLH speakers.

Of course our Model Thirty-Two won't deliver as much bass response as, say, our Model Seventeen. But the basic listening quality of the new KLH Thirty-Two is superb by any standard. In fact, we'll match the Thirty-Two against any speaker in its price class: even against most speakers costing twice its price. For when it comes to making reasonably-priced speakers that deliver an inordinate amount of sound, that's really what KLH is all about.

And about that, there can be no misunderstanding. For more information on the Model Thirty-Two, write to KLH Research and Development, 30 Cross St., Cambridge, Mass. 02139. Or visit your KLH dealer.
The popular Heath AR-29 receiver (reported on in April, 1970) has now been "separated" into the AA-29 amplifier and the AJ-29 tuner. For this report, we tested an AA-29. In its electrical performance, the AA-29 is the full equivalent of the audio section of the AR-29 receiver, with the addition of two high-level inputs. It is rated at 35 watts per channel continuous output into 4- or 8-ohm loads, and 25 watts into 16 ohms, from 20 to 20,000 Hz, at less than 0.25 per cent distortion. There are large finned heat sinks for the power transistors, and a heavy power transformer feeding an electronically regulated power supply. The output transistors are protected against damage—even from short circuits. One feature of the AA-29 which we can't recall seeing on any other amplifier is individual input-level adjustments for all inputs and for both channels. They are located under the amplifier, accessible through holes in the bottom plate. Once they are set, all program sources will be at the same volume when the user switches from one to another. This is certainly a desirable, though uncommon, provision. The AA-29 is physically large—the same size as the AR-29 receiver.

The kit builder will find the latest construction techniques used in the AA-29 to simplify its assembly and check-out. Practically all the circuit components, even the front-panel controls, are mounted on printed-circuit boards that plug into the unit. The interconnecting wiring is in a pre-assembled cable harness with the individual wires stripped and cut to length. A built-in meter, complete with test probes and function switch, permits the builder to test his work during construction, to check out the finished product, and to maintain it, in most cases without additional test equipment. Our kitbuilder reports that construction was straightforward and took about 15 hours. The Heath AA-29 sells for $149.95 in kit form. A walnut cabinet costs $19.95.

Laboratory Measurements. Heath's unusually conservative rating policy has been applied to the AA-29. At the clipping point, we measured 50 watts per channel into 8 ohms, about 30 watts into 16 ohms, and 78 watts (more than twice its rating) into 4-ohm loads. The 1,000-Hz harmonic distortion and the IM distortion were both under 0.1 per cent from 0.1 to over 50 watts, and were typically between 0.02 and 0.05 per cent over most of that range. Unlike many amplifiers with distortion that increases markedly at low power outputs, the AA-29 has less than 0.1 per cent IM distortion at an output of only 10 milli-watts! At the rated 35 watts per channel, the harmonic distortion was under 0.08 per cent from 20 to 20,000 Hz (typically about 0.03 per cent), and remained the same or lower at half power and at one-tenth power. Full power was available down to 20 Hz with less than 0.05 per cent distortion. This attests to the capability of the power supply of the AA-29. Many manufacturers, with justification, would have rated this amplifier at 50 watts per channel.

The loudness compensation boosted both low and high frequencies. In contrast to the case of the vast majority of amplifiers, the complete input-level adjustment capability of the AA-29 makes its loudness compensation a meaningful feature, since the setting of the volume control relative to listening level is fully under the user's control.

The bass tone control had a sliding inflection point, varying from about 150 to 700 Hz. The treble control response pivoted at about 2,000 Hz. There is a tone-control defeat (by-pass) switch. (To our surprise, the gain of the amplifier increased by 4 dB when the tone controls were cancelled. We don't know if this is typical performance or a peculiarity of our test unit.) The RIAA phono equalization was accurate within ±1 dB from 30 to 15,000 Hz, measured at the speaker terminals.

The phono-input sensitivity for 10 watts output was continuously adjustable from 1.25 to 19 millivolts. At the AUX inputs, 95 millivolts was needed for a 10-watt output. Hum and noise were inaudible: 75 dB below 10 watts on high-level inputs, and 65 to 70 dB below 10 watts on phono, depending on the setting of the sensitivity control.

When the phono sensitivity is properly set for a specific cartridge, input overload is virtually impossible, although at maximum sensitivity the preamplifier overloaded at only 24 millivolts. At minimum sensitivity, however, overload occurred at 135 millivolts input.

(Continued on page 38)
"My perfect summer drink?
Lots of crushed ice; squeeze a wedge of lime.
And the perfect martini gin,
Seagram’s Extra Dry."

Introducing Memorex Chromium Dioxide Tape.

New Memorex Chromium Dioxide Tape has a totally different composition from conventional cassette tapes. It extends frequency response and delivers a clarity and brilliance of sound never before possible on cassette. Chromium Dioxide is so drastically different, you’ll need a specially designed cassette recorder to use it.

You’ve probably read about conventional cassette tapes that claim to be so improved it’s not necessary to switch to special Chromium Dioxide equipment.

Let us simply say this:

Equipment manufacturers recognized the Chromium Dioxide breakthrough, and designed cassette recorders to take advantage of it.

Listen to a Memorex Chromium Dioxide
The tape that will change your whole opinion of cassettes.

Cassette on the new specially designed equipment. Compare it to any cassette that claims equal performance on standard equipment. You'll find there's no comparison.

MEMOREX Recording Tape
Reproduction so true it can shatter glass.
THE A-2000 speaker system produced by the Mincom Division of the 3M Company is a two-way bookshelf design measuring 23 x 13 1/2 x 10 1/4 inches and weighing about 30 pounds. The 8-inch acoustic-suspension woofer operates up to 1,300 Hz, above which a 1-inch-diameter dome tweeter takes over. The tweeter radiates through a diffraction loading plate to further improve its high-frequency dispersion. There are three level controls in the rear, permitting frequency response to be adjusted in the low-, middle-, and high-frequency ranges. However, reference marks adjacent to the three level controls indicate the settings that achieve a relatively uniform frequency response in a typical listening room. The system impedance is nominally 5 ohms, to take advantage of the higher output power delivered by most transistorized amplifiers into low-impedance loads. The A-2000 is relatively inefficient, and 3M recommends at least 15 to 25 watts of amplifier power per channel to drive it. The system is fused to prevent overdrive damage to the tweeter. The list price of the A-2000, finished in oiled walnut, is $159.95.

Laboratory Measurements and Listening Tests. Because of the variety of response characteristics made possible by the unusually flexible controls, the 3M A-2000 required more test time than any other speaker in our experience. The installation instructions detail a rather involved "cut-and-try" listening procedure for balancing the speaker response—a process that must be performed for both stereo speakers. Fortunately for the user, the factory calibrations should prove to be very close to the ideal in most rooms. We have rarely, if ever, measured an overall frequency response as flat and smooth as we did on the 3M A-2000. The averaged multi-microphone pickup was within ±2.5 dB from 110 to 15,000 Hz, and gave every evidence of continuing well beyond that frequency (where our microphone calibration ends). At lower frequencies the output gradually increased to a maximum at 70 Hz, and it fell off smoothly below that frequency. Our final curve was within ±4 dB from 38 to beyond 15,000 Hz, which is excellent as is, and almost certainly could have been further improved by adjusting the speaker's controls.

The low-frequency level control affected frequencies below about 1,500 Hz, with a total range of some 5 dB. The mid-range control operated principally between 500 and 3,000 Hz, with a maximum effect of about 10 dB occurring at about 1,500 Hz. The high-frequency control was effective above 2,000 Hz, with a maximum range of some 10 dB in the 5,000 to 10,000-Hz region.

The low bass output remained strong down to about 40 or 50 Hz, and harmonic distortion at a 1-watt input (which produced a comfortable listening level) was 2 per cent at 50 Hz and 5 per cent at 40 Hz. At a very loud 10-watt drive level, the distortion was 2 per cent at 70 Hz and 5 per cent at 50 Hz. Tone-burst response was very good at all frequencies. The system impedance measured between 4.5 and 7 ohms over the audio range, except at the bass resonance of 60 Hz, where it rose to about 20 ohms.

In our simulated "live-vs.-recorded" listening test, with the factory-recommended control settings, there was a slight trace of mid-range coloration and a slight dulling of the extreme high frequencies above 10,000 Hz with such program material as wire brushes on cymbals and the like. A small audible improvement was obtained by increasing the high-frequency control setting. Dispersion was good, but a loss of extreme high frequencies was audible when we listened 45 to 90 degrees off axis, as occurs with most speakers. Overall, we would grade the 3M speaker A-minus in this test, placing it among the better speaker systems, but just below the handful of top-scoring units we have tested.

Comment. The 3M A-2000 sounds as smooth as its measured curves would suggest. It is almost totally neutral in character, with no characteristic emphasis or de-emphasis of any portion of the spectrum. By any standards, it is an excellent performer.

Aside from its intrinsic virtues, which have been described, the unusual flexibility of this speaker gives it a unique advantage. Many speakers measure—and sound—very well in a specific environment such as our test room, yet in another location fail to deliver enough bass, or have too much output in the mid-range, or exhibit some other unforeseen characteristic. More often than not, the speaker's mid-range and tweeter-level adjustments and the amplifier tone controls are not adequate to correct the problem fully. We suspect that the 3M A-2000 can be made to sound better in a wider variety of listening rooms than the vast majority of competitive speaker systems, regardless of their intrinsic quality. Considerable patience might be required of the user to optimize the speaker response, but the results should be well worth the effort.

For more information, circle 159 on reader service card.

Excellent tone-burst response characterized the 3M A-2000. These oscilloscope photos were taken (left to right): 80, 1,500, and 8,500 Hz.
Seagram's V.O.
For people who really know how to live.
They seem to do everything. And they do it right. Even when it comes to having a drink. It has to be Seagram's V.O. Very special. Very Canadian. Very right. Known by the company it keeps.

Seagram's V.O. Canadian

CANADIAN WHISKY - A BLEND OF SELECTED WHISKIES. 81 PROOF. SEAGRAM DISTILLERS COMPANY, N.Y.C.
An infinite choice of speeds.

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

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

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

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

Lenco turntables from Benjamin

CIRCLE NO. 9 ON READER SERVICE CARD

Automatic Turntable Stall

Q I have an old automatic turntable that has an annoying idiosyncrasy. In single play or manual operation it works fine, but it stalls during the change cycle. Why does this happen?

JASON HECKLER
Minneapolis, Minn.

A The drive arrangement used in almost all record changers is shown in simplified form below. A pulley installed on the motor shaft drives a rubber-rimmed idler wheel, which, in turn, drives the inner rim of the platter. Not shown in the drawing is the cam (or gear) plus lever arrangement that picks off power from the rotating platter to move the arm during the change cycle.

Stalling can be caused by insufficient friction between the motor, idler, and platter—or too much friction in the motor, idler, and platter bearings. Rather than spend time in attempting an exact diagnosis of the problem, the most sensible procedure would be to embark on a general cleaning and lubrication of the moving parts of the machine. The platter is easy to remove after you pry off the "C"-washer often used to clamp it to the spindle area. Pull the platter straight up, rocking it gently. If it doesn't come off easily, it may be necessary to tap it rather hard with a block of wood or something similar while pulling upward. Once the turntable drive mechanism is exposed, locate the idler and check the condition of its rubber parts. They should be about as soft as the rubber heel of a shoe and not have a glazed appearance. You may be able to restore the surface by cleaning it vigorously with alcohol and a cloth. If that doesn't help, try a judicious application of sandpaper to the rubber edge to roughen its surface. Be careful to remove as little rubber as possible.

Next, check to see that the idler rotates freely on its bearing. If it does not, remove the C-washer that holds it on the shaft. Clean the idler center hole and the shaft with alcohol, and reassemble. Put a drop of 3-in-One oil on the idler shaft, being very careful not to get any on the rubber parts of the idler. Check the lubrication of the various cams and levers. If you find lumps of dried grease on the bearing surfaces, remove them—if you can—without alcohol. For stubborn cases you might try household cleaner, but keep it away from plastic and rubber parts. Relubricate the areas with a light grease (or Vaseline). As a final step, scrub the inside rim of the turntable platter with alcohol.

If these first-aid measures are of no help, the idler wheel (or other rubber parts found in some turntables) may have deteriorated beyond repair—or the motor itself may have internal difficulties. If it's a motor problem, repair or replacement may be excessively expensive, but for the various rubber parts, write to the manufacturer, who will possibly have replacements available at nominal cost.

Cost of Repairs

Q I was recently charged $55 for a repair on a receiver that cost me about $250 when new. I find that outrageous. What can be done about it?

GEOFFREY WINDOR
Boston, Mass.

A If I read Mr. Windor's letter correctly, his outrage derives only from the price he paid, not from the quality of the repair. Repair costs on everything are high, and the reasons are not difficult to discover. Almost everything one buys today is the end product of a highly developed, possibly automated,
You can’t blame people these days if they want to get the most for their money. Maybe that’s why the Pioneer SX-990 is so popular. When you compare its specifications and features with similar priced AM-FM stereo receivers, and then listen to its performance, you become a believer.

For instance, with sensitivity at 1.7 microvolts, the SX-990 brings in the most timid FM stations and makes them sound as though they were just around the corner. Or, if you live where FM stations are a hairline away from each other on the dial, it delivers clear, interference-free reception. Small wonder, with a capture ratio of 1.3dB.

Pioneer has invested the SX-990 with 130 watts of Hi-Fi music power (28+28 RMS at 8 ohms). And it’s all clean and smooth with a low 0.5% harmonic distortion at rated output. Its top quality circuitry includes four IC’s and a special low-noise FET.

Versatile, you can connect two sets of speaker systems and plug in a record player, tape recorder, microphone and headset. The pre- and main amplifiers may be used separately for extra flexibility. Additional features include: loudness contour control... dual tuning meters... pushbutton muting... center channel output.

Sensibly priced at $299.95, an oiled walnut cabinet is included. Make your own comparison test at a Pioneer dealer today.

U. S. Pioneer Electronics Corp.,
178 Commerce Rd., Carlstadt,
N.J. 07072

PIONICCR
mass-production line. However, when looking at the repair and servicing process, we find that it is usually all hand labor—and highly skilled hand labor at that. As a matter of fact, in terms of man-hours, it is not uncommon for a repair on a small electronic device (such as a transistor radio) to take more time than it originally took to build the unit on an efficient assembly line. I really don’t know any way of reducing the relatively high cost of repairs when the equipment is built by twentieth-century techniques, but must be serviced with an eighteenth-century handicraft approach.

Doppler Distortion

Q I’ve heard a lot of pros and cons on the question of Doppler distortion in loudspeakers, which results when a loudspeaker cone is reproducing a very low frequency (which requires a long cone excursion in direct-radiator systems) and at the same time is reproducing some higher frequency. What is your reaction to the question of Doppler distortion?

ARNO LD PETERSON
Trenton, N.J.

A I am still open-minded on the matter. The Doppler effect is most familiar to us as the phenomenon that causes a whistle of a passing train to shift upward audibly in frequency as it is coming toward you and downward as it goes away from you. No one questions that the Doppler effect occurs with passing trains, but this does not resolve the question of whether it is an audible effect in conventional loudspeakers. True, Doppler distortion in loudspeakers can be measured by anyone with the equipment to do it. Suppose a speaker cone is reproducing low frequencies which require a large amount of cone excursion and is simultaneously reproducing a higher frequency—which requires far less cone movement. Because of the fact that the two frequencies are being reproduced by the same cone, the higher frequency is Doppler modulated by the lower frequency.

So much for the theory. Now let us take as an extreme case a woofer cone that is reproducing a 20-Hz signal with a one-inch peak-to-peak excursion. The time it takes for the cone to travel from full forward to full back position is 1/40 of a second when reproducing 20 Hz. In other words, it is traveling one inch in 1/40 of a second. Now, if we were to convert that into miles per hour, it would average perhaps 3 m.p.h. My guess is that a train going by anyone at 3 m.p.h. would not have any audible Doppler shift in its whistle. Or perhaps you could rig a practical test by having a soprano, while singing, walk by you at 3 m.p.h. (a rather moderate pace) and see what you might be able to detect by way of frequency shift. Admittedly, the rapid in/out alternation of a speaker cone might make whatever shift there is more audible, but I await further evidence on the matter.
AR®, JBL®, Altec-Lansing®,
Bozak® lovers
take heart...

there's a
Heathkit® Speaker
made just for you.

New AS-103... the highly praised AR-3a in low cost kit form. Uses the three Acoustic Research AR-3a drivers in a sealed acoustic suspension enclosure. 12" woofer provides crisp, clean bass down to the limits of hearing... special hemispherical dome midrange & tweeter, combined with a precisely-engineered crossover network, deliver the clean, transparent AR sound. Separate level controls for midrange & tweeter. 4 ohms. Luxurious oiled walnut cabinet 25" H x 14" W x 11¾" D. 68 lbs. $189.95*

New AS-102... an outstanding 3-way system with famous Bozak speakers. A 12" woofer, 6" midrange and two 2½" tweeters in an infinite baffle design offer clean, natural response to well beyond audibility on both ends of the audio spectrum. An 8 ohm, medium efficiency system; handles up to 50 watts. Complete with a beautifully designed and finished factory assembled Mediterranean cabinet... measures 29¾" H x 27¾" W x 19¾" D. Finished in rich pecan veneers & hardwoods. 114 lbs. $259.95*

Heath AS-48... featuring custom-designed JBL speakers. Two custom-designed JBL speakers in a classic, one-piece pecan finish damped reflex, tube-ported cabinet deliver extraordinary bookshelf performance. Special 14" woofer delivers crisp, pure bass you can feel as well as hear; clean, lifelike highs come from the 2½" JBL direct radiator. Three-position high frequency level control. 8 ohms. Handles up to 50 watts. Measures 14" H x 23½" W x 12" D. 57 lbs. $184.95*

Heath AS-38... a medium-priced, efficient system with famous JBL speakers. The 12" JBL woofer produces rich, full-bodied bass down to the limits of hearing; 2" direct radiator tweeter delivers clean, natural highs to beyond audibility. Handles up to 40 watts program material. 8 ohms. High frequency level control. Assembled, air-tight walnut veneer cabinet, damped reflex, tube-ported. Measures 14" H x 23½" W x 11¾" D. 49 lbs. $154.95*

New Heath AS-101... a superb 2-way system with Altec-Lansing speakers. A remarkable 2-way bass reflex system incorporating a high compliance 15" woofer and high frequency sectoral horn to bring you extremely faithful reproduction throughout the audio range. A high efficiency 8 ohm system capable of handling up to 50 watts. High frequency level control. Luxurious Mediterranean styled cabinet measures 29½" H x 27¾" W x 19¾" D; finished in rich pecan veneers and hardwoods. 128 lbs. $259.95*

HEATH COMPANY, Dept. 40-7
Benton Harbor, Michigan 49022

Enclosed is $________ plus shipping.

Please send model(s).

Please send FREE Heathkit Catalog.

Please send Credit Application.

Name

Address

City

State

Zip

Prices & specifications subject to change without notice. HF-247

CIRCLE NO. 24 ON READER SERVICE CARD
BRING NEW LIFE TO YOUR SYSTEM

Dokorder 6020 is a Automatic Reversing tape deck tailored to the needs of sophisticated audiophiles. Exclusive Automatic Continuous Reverse, 3 motors, 4 heads. A quality deck for quality systems.

GOING ON RECORD
By JAMES GOODFRIEND
Music Editor

LIMITED TALENTS

WHEN the history of American popular music is finally written, the authors are going to have one devil of a time with the music of the Fifties, Sixties—and probably the Seventies. The problem will lie not so much in the admittedly incredible rate of change, in the obvious vacillation of public taste, even in the wholesale break with the music of previous generations, as in the fact that much, if not most, of the excitement has been stirred up by minor figures. There have been a few important writers and performers, and there are a few who may yet become important, but in general it has been a period dominated by limited talents.

There is a temporal component to this. The careers of Crosby and Sinatra, for example, spanned decades, but there was also a host of those who enjoyed lesser commercial success and yet stayed in public favor for long periods of time: Vic Damone, Connee Boswell, Dick Haymes, Hildegarde, and many others. That was the Thirties and Forties. But someone like Bo Diddley, who was bigger than big in the later Fifties, is not even a name to most of those who listen to rock today. In fact, it has become perfectly possible in these last twenty years for an artist to hit the top with his first record and never be heard from again; Mary Hopkin did it, and she probably isn't the only one.

But the shorter time span is not the whole story; in fact, it is only one of the threads of the story itself, which is the proliferation and astonishing success of those performers and composers who can do one or two kinds of things very well, and that's all. The woods are full of them, and so are the charts.

Laura Nyro is certainly a case in point. It has always been difficult to pin down exactly what it is that Nyro does (purely in terms of music and lyrics), and that is all to the good in the making of a pop star. Unlike so many of the rock singers and players, she evinces practically no Eastern influence in her music; it is American through and through, both white and black. There's a lot of blues in it—but one feels it didn't all come from the original source—and a great deal of Forties swing. Taken all together, with her somewhat lesser gift for words, her typical flights into the upper ranges of her voice, and the multi-voice backing choruses of her arrangements, there is a very individual and likable style. The problem is it doesn't go anywhere—except around again.

Because Laura Nyro as singer is tied to Laura Nyro as songwriter and Laura Nyro as arranger, everything she does, from her first Verve record to her latest Columbia one, falls into a small area defined by three fixed points. She writes the same two or three kinds of songs, she sings them in the two or three variations of her basic singing style, she arranges them in one of the two or three sorts of arrangements she can do. No one can take away from her the fact that she has talent and individuality, or that she has created excitement and enjoyed success. But she is a limited talent, a perfect, though hardly isolated, example of the kind of artist who is creating most of today's pop music.

Back in 1960, a young Philadelphia singer-dancer named Ernest Evans recorded a song called The Twist under the professional name of Chubby Checker. Chubby Checker had about twenty singles and about fifteen albums to his credit, and for a while he was the hottest thing in pop music. But despite his infectious good humor and the fact that what he did (whatever you may think of it) he did very well, his was a one-number act. It is not at all difficult to add to this list. Certainly Leonard Cohen has shown no great development, either as writer or singer, over his three albums, despite a literary talent a cut above the usual (some would say many cuts above, but I wouldn't). Simon and Garfunkel continue to do little more or different than what (Continued on page 46)

STEREO REVIEW
If exceeding its performance claims makes a receiver great...
the Scott 387 is about the greatest.

For months we’ve been telling you what a great performer the 387 AM-FM stereo receiver is. Now a respected independent test laboratory report* shows how conservative our performance claims really are:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Our Data Sheet Claims</th>
<th>H-H Lab Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous power (RMS) both channels driven</td>
<td>55 watts into 8 ohms</td>
<td>67 watts into 8 ohms</td>
</tr>
<tr>
<td></td>
<td>85 watts into 4 ohms</td>
<td>100 watts into 4 ohms</td>
</tr>
<tr>
<td>Harmonic distortion</td>
<td>0.5% at rated output</td>
<td>Below 0.1%, 0.1-60 watts</td>
</tr>
<tr>
<td>IM distortion</td>
<td>0.5% at rated output</td>
<td>Below 0.25%, 0.1-65 watts</td>
</tr>
</tbody>
</table>

The report says the 387 has “one of the most powerful amplifiers ever offered in an integrated receiver”. Add to this all the other innovative features such as Scott’s exclusive “Perfectune” indicator, permanently aligned FET front end, full complementary output stage, solderless “tension wrap” connections, and you’ve got a receiver which is unsurpassed in the $399 price class. Ask your Scott dealer for a demonstration of the 387 receiver today.

*Hirsch-Houck Lab report appearing in Electronics World, May, 1971

CIRCLE NO. 100 ON READER SERVICE CARD
YOU DON'T NEED A QUADRAPHONIC SYSTEM TO ENJOY OVATION'S NEW LINE OF QUADRAPHONIC RECORDS

And we'll prove it with this specially priced record offer

While you're still planning the expansion of your present stereo system into 4 channel quadraphonic you can enjoy our records in full stereo. And when you've finally gone quad you already have a fine quadraphonic library.

Ovation Records presents the world's first complete catalog of COMPATIBLE STEREO/QUADRAPHONIC records.

And to introduce you to this excellent catalog we are offering a special preview LP at a very special price. Experience for yourself the total musical environment that quadraphonic sound places you in. And enjoy the bright new sounds available from Ovation Records. This broad sampling includes rock, jazz, easy listening, big band sounds and more.

This COMPATIBLE STEREO/QUADRAPHONIC record contains both 2 and 4 channel musical programs with no sacrifice in audio quality. Played on your stereo equipment you get full stereo without damage to the 4 channel information. Its complete compatibility makes this type of record your very best investment, even if you don't yet own a quadraphonic system.

Regular $5.98 list price LP only $2.98 each with coupon below.

Ovation Records

Produced by OVATION RECORDS on IMSTEREO-4™ system

Enclosed is__________check;__________Money order for

OVATION COMPATIBLE STEREO/QUADRAPHONIC SOUND ALBUM(s)

(Quantity) Total remittance $__________

(type or print) (Illinois residents add 5% sales tax)

Name

Address

City State ZIP

CIRCLE NO. 34 ON READER SERVICE CARD

they have done before, although they have certainly developed into pop music's most peripatetic researchers. Blood, Sweat and Tears, though it has changed, has not developed. The Byrds have shown only how well they did what they originally did—something which they no longer do. Cream, which might have developed, split instead, as have many others. Cat Mother was a one-song team, the Left Bank a two-song team, and Spanky and Our Gang now sound like they work for Bill's Gay Nineties.

What it all comes down to is that each of these groups or individuals has for a brief time, or sometimes several brief times, achieved incredible commercial (and sometimes artistic) success and then has either continued to duplicate the original style without further success or attempted another style without achieving comparable results. Development and staying power are rare. The contrast is with times before, say, 1950, when the hit records were shared among a relatively small group of artists and songwriters, alternating with one another over the years.

There are, of course, big artists today too, but far fewer than then: the Beatles, until their recent breakup; perhaps the Rolling Stones; certainly Bob Dylan; Streisand; probably Joan Baez and Judy Collins. Who else? A few others. I think the insistence of many of today's artists upon performing only or mostly their own material has a good deal to do with it. One has to be a doubly major talent, and a continually developing one too, to get away with that, and there are few of those in any generation. Even the best singer would be hard-pressed to write sufficiently varied material for himself to maintain a consistently high artistic level; even the best songwriter would be hard-pressed to develop a singing style variable enough to emphasize ever-different aspects of his writing. One talent does not presuppose the other, and if the artist does his own arranging too, the matter is made worse.

When you come right down to it, there are few really good songs being written today; what are being created are really not songs at all, but complete performances in which the song is only one component. It shows in the lack of really different interpretations by different artists of the same song. Virtually everyone who has sung a Laura Nyro song (to bring it all back to her again) has taken not merely the tune and the words, but the singing style and the arrangement too—copied the performance, in fact. This, though it may be monetarily rewarding, is hardly healthy. Frank Sinatra, addressing the recent Songwriters' Hall of Fame banquet crowd, said of the writers: "Without you I would have been selling ties." Perhaps a new crop of tie salesmen is growing in the garden of pop music.

STEREO REVIEW
Deep inside a building at New York's Lincoln Center for the Performing Arts, recorded history is being recorded again. At the Rodgers and Hammerstein Archives of Recorded Sound, technician Sam Sanders is busy continually transcribing all sorts of old recordings, transcriptions and acetates. Not only will there then be a more permanent record of this valuable material, but access to it is made easy through a sophisticated catalogue system, by which interested persons can hear material that was otherwise unavailable.

The Rodgers and Hammerstein Archives of Recorded Sound are part of the New York Public Library, Research Library of the Performing Arts, and encompass virtually the entire history of recorded sound. But to get these early (and often irreplaceable) discs onto tape wasn't easy. Because until the recording industry established its own standards, playing speeds, groove widths and depths were widely varied.

Stanton engineers worked closely with Archive Head David Hall and engineer Sam Sanders when the Archive Preservation Laboratory was being set up. Standard Stanton 681 cartridge bodies were chosen for their superior reproduction characteristics. However, some 30 different stylus types had to be prepared to give the tape transfer operation the variety needed to match the various old groove specifications. Each was hand-made by Stanton engineers to fit a particular disc's requirements. So when Sam Sanders begins the careful disc-to-tape transfer, he must first match the stylus to the record. Both microscope and trial-and-error techniques must be often used together. But one of the special styli will enable every last bit of material to be extracted from these recorded rarities.

It goes without saying that a company willing to take such care in helping to preserve recorded history must also be interested in superior reproduction of today's high fidelity pressings. Which is one reason why Stanton cartridges remain the choice of professionals the world over.

For an informative brochure about our professional-quality cartridges, write to Stanton Magnetics, Inc., Terminal Drive, Plainview, N.Y. 11803.
BEING a nineteen-year-old college student who has grown up with rock music, I believe that I qualify as part of that “vast youth market” the classical record industry, according to recent reports, has been failing to reach. And after following with much interest this magazine’s discussion of the “classical crisis,” I would like to offer readers the observations of a confirmed rock fan who has come to discover classical music in spite of the record industry.

Let me make it clear from the outset that my situation has not been exactly “average.” For four of the past five years, I have worked in a record shop, albeit a small shop in a small town. As you might expect, we sell absolutely no classical records. But I have spent my idle moments reading Billboard (the trade publication), and have found that record companies actually issued records other than those which make the “Top LP’s” chart. With the help of record reviews and disc-jockey friends, I began to experiment. Before long, Wes Montgomery and Antonio Carlos Jobim began to take their places in my collection alongside the Beatles and the Rolling Stones. And when I heard about “Switched-on Bach” and “Elvira Madigan,” I bought them. And liked them. But, contrary to what you might expect, that is not what opened the door.

In my digging for new sounds I had found sampler records to be an invaluable help. They are usually cheap ($2.98 each, or perhaps two discs for $5.98), and almost always contain something worth listening to, since their raison d’être is to get you to buy the artists’ full albums at regular prices. So, while pursuing this method of discovering new delights, I was browsing one day in a large record shop (in a larger city, of course) when I hit upon an album entitled “The New Spirit of Capitol.” Thirteen cuts, with 48 not much for one record, I figured, let alone two, so I gambled. And won. On the inside of the fold-out jacket were photos and capsule biographies of each of the artists on the record. Many of them—Christopher Parkening, Lorin Hollander, Aleksander Slobodyanik—were not that much older than I was. If classical musicians are old fogeys, as I’d always heard, what the devil were members of my generation doing in classical music? When I put on the record, I found out. I was immediately attracted by Seiji Ozawa’s rendition of the final movement of Barók’s Concentro for Orchestra, Aldo Ciccolini playing Three Next-to-Last Thoughts by Satie, and Jacqueline du Pré and Daniel Barenboim in the fourth movement of Brahms’ Sonata for Cello and Piano in F. Even though I was still put off at first by the operatic selections, it wasn’t long before Gwyneth Jones had won me over with Verdi’s haunting Willow Song from Otello, and the last barrier had come down.

After nearly wearing the record out, I had to hear more. Then (and this, Mr. Record Company Executive, is what you’ve been waiting for) I went out and bought his “Close-Up” album. It contains a piece of Vaughan Williams that I like, so one of my upcoming purchases will be some Vaughan Williams by Sir Adrian Boult. If I like Boult... and on, ad infinitum. And it is all traceable back to a one-dollar sampler album.

But how many young people know that such an album exists? If my experience has been relatively rare among young people, it is the record companies’ fault. The sampler method has been proven successful in the record music field: Warner Brothers has sold untold millions of rock albums simply because some creative people in the company put together imaginative samplers, made music-hungry young people aware of them, and sold them at cost—$2 for two records, $3 for three, etc. And with each sampler comes a booklet chock full of information on each artist represented. Result: young people identify with the company and with its artists, and buy its records.

COLUMBIA’S “Greatest Hits” series has been a courageous effort in this direction, but it has not succeeded in winning the youth market. Why not? Because instead of selling people—the artists—the albums have been trying to sell compositions. Why should Columbia want us to buy its Tchaikovsky Fourth—just because it is the Tchaikovsky Fourth? I should hope not, since there are over a dozen recordings of it available. Rather, it may be interesting to the young because Daniel Barenboim conducts the New York Philharmonic on this disc. If record shops were to put up signs in their windows reading “Just Released—Mud Slide Slim,” how much effect do you think it would have? Instead, they put up signs proclaiming, “Just Released—New Album by James Taylor,” and the kids come in droves. Instead of trying to sell young people on Charles Ives, the companies should tell them about Michael Tilson Thomas and the like. If you can persuade them to listen to Thomas, they will find out about Ives on their own. But until young people are convinced that classical music is made by real people, sales of classical records will continue to decline.
WHY
AREN'T YOU LISTENING TO THE
2 EXTRA CHANNELS IN YOUR
STEREO RECORDS, TAPES, AND FM BROADCASTS?

There is four channel material already present on your stereo records, tapes and FM broadcasts but you are only listening to two of them. Add the Lafayette Dynaquad 4-Channel Adapter to your present stereo receiver or amplifier (such as the Lafayette LR-1500TA or LA-125TA) and two additional speakers and you will experience the dramatic difference of four channel sound NOW!

During a stereo recording session, the microphone picks up two types of sounds: direct and reflected, both of which are always included on a stereo recording. When playing back stereo records, tapes, and FM broadcasts in a conventional 2-channel stereo system, the reflected sounds are masked by the louder direct sounds coming from each of the two front speakers. The great importance is that reflected sounds create the depth and spatial breadth one associates with a performance given in a concert hall rather than in the downstairs closet! The Lafayette Dynaquad recovers and separates a substantial amount of this reflected sound from the direct sound. This is not produced artificially as in the case of reverberation units, and synthesizers. The result is a dramatic new sound dimension to all existing stereo program sources without the need for any additional amplifiers!

So... why listen to only two channels when you can hear music the way it was meant to be heard with FOUR CHANNEL STEREO by LAFAYETTE? Price $29.95! !

*Exclusive Licensee of Dynaco

THE RENOWNED LR-1500TA IDEAL MATCH FOR NEW 4-CHANNEL SOUND!

The perfect matchmate for the Lafayette Dynaquad Adapter. Widely acclaimed by critics and consumers alike, the Lafayette LR-1500TA 240 watt AM/FM stereo receiver combines excellence in design, performance and operating convenience with the latest advances in solid-state circuitry. Four Integrated Circuits and five Field Effect Transistors in the FM front end assure you of pulling in the weak stations as well as the strong with noise-free clarity and tonal purity. “Acritune,” our precision tuning circuit, activates a light on the front panel when your station is perfectly tuned, and Computor-Matic®, our exclusive overload protection circuit, insures against amplifier damage. In addition, the LR-1500TA features a complete set of automatic and manual controls such as automatic FM stereo/mono switching, interstation muting circuit to silence the receiver when you’re tuning between stations, an illuminated D’Arsonval signal strength meter, front and rear panel tape output jacks, direct tape monitor switch, and a dual system speaker switch which permits you to enjoy stereo in one or two rooms separately or simultaneously. Price $299.95! !

LAFAYETTE®

Write Today For Your Big FREE 1972 Catalog. 468 Pages!

Send me Free 1972 Catalog 720

Name
Address
City
State
Zip

LAFAYETTE RADIO ELECTRONICS CORP. Dept. 11071 Box 10, Syosset, N. Y. 11791

CIRCLE NO. 30 ON READER SERVICE CARD
Our new receiver incorporates an advanced engineering concept made famous by a leading tea bag.

Not long ago, the tea people demonstrated that it was possible to increase the performance of a tea bag simply by changing its fundamental structure.

A similar approach has given birth to a whole new line of stereo receivers, the first of which is here now: the Harman-Kardon 930.
The 930 is the first receiver ever built with twin power. Unlike every other receiver, it has two separate power supplies—two separate transformers, two separate rectifier circuits and two separate filter sections.

To really appreciate what this means, you have to hear it in action. Let's say you're listening to an orchestra through a conventional receiver. Suddenly a stirring bass passage comes along—a protracted organ chord for example.

To reproduce all that bass, a huge amount of electrical power is required. In conventional stereo receivers, both amplifiers pull that power from a common source. The amplifiers begin struggling for whatever they can get. The result is a loss in acoustical power—and a debilitating interaction between the two amplifiers.

This can't happen with the 930. The demand for power is just as frantic. But the amplifiers, each with its own power source, have no trouble meeting these demands. Each supplies the needed power without affecting the other. No fuzziness or veiled effect.

The result is virtually distortionless sound—not just at 1,000 Hz, where even ordinary receivers do fairly well, but throughout the entire frequency spectrum. Total harmonic distortion remains below 0.5% from 20 Hz to 20,000 Hz (at full rated output, 45/45 watts RMS, both channels driven simultaneously into 8 ohms). The distortion curve isn't a curve. You can draw it with a straight edge.

Because of twin power, the 930 offers remarkable square wave response: less than 5% tilt at 20 Hz; rise time is less than 2 microseconds.

But there's more to a receiver than amplifiers and power sources. The 930 also offers a tuner every bit as sophisticated as the rest of the system—and quite a few other things we'd like to tell you about.

Write to us and we will: Harman-Kardon, Inc., 55 Ames Court, Plainview, New York 11803. The Harman-Kardon 930. The first receiver with twin power.

A subsidiary of JBL, Inc.
The same Shure development group that created the Super Track V-15 Type II Improved cartridge has perfected a reliable, simple, low-cost stylus force gauge that meets the needs of the dedicated discophile. It's designed to operate in the ½ to 3 gram range, and is accurate within 1/10th of a gram in the critical ½ to 1½ gram range—the force most widely used with today's better turntables and cartridges. It will enable you to accurately adjust the tracking force for maximum trackability while protecting all your records. Cost? Only $4.95—just about the price of one good stereo disc.

Shure Brothers Inc.,
222 Hartrey Ave., Evanston, Ill. 60204.

CIRCLE NO. 42 ON READER SERVICE CARD
THE "classical crisis," as it was defined in STEREO REVIEW’s special issue for February 1971, continues to be of concern to every segment of the recording industry. According to “inside” reports, classical record sales have fallen to an alarmingly low level. Many reasons have been advanced for this state of affairs. One factor, certainly, is the prevailing blandness of much of today’s music-making by a number of heavily promoted recording artists. Another, unquestionably, is the constant duplication of the standard orchestral fare by conductors whose musical points of view are hardly deserving of permanent preservation. Not long ago a Koussevitzky or Toscanini or Furtwängler or Beecham would record those works (and usually only those works) that he had played often and toward which he felt a particular emotional or spiritual affinity; today, too many recordings are made to satisfy contractual obligations for a certain minimum number of recordings per year. The result has been a veritable flood of "basic repertoire" recordings in recent years—many of which should probably not have been made, let alone released to the public! Out of all the present turmoil in the industry, a more realistic approach to the artist-and-repertoire side of the business may evolve—a salutary development.

In this connection, the industry would do well to consider even greater elasticity in exclusive contracts than currently prevails. The arrangement whereby EMI (Angel) borrows Pinchas Zukerman from Columbia in exchange for allowing Daniel Barenboim to undertake conducting assignments on the Columbia label is not a new phenomenon—Erich Leinsdorf conducted many opera recordings for RCA Victor a dozen and more years ago while he was under exclusive contract to Capitol, to cite but one notable instance of cross-fertilization from the past. An increasingly more enlightened industry-wide policy in this area might result in a greater number of significant recordings.

But for the moment, a secondary result of the flurry of recording in the recent past is that the consumer’s choice of discs of the basic repertoire items for his library has become immensely complicated. As a guide to the perplexed record buyer, I have once again prepared my annual “updatings and second thoughts” on the available recordings of the pieces covered in my monthly Basic Repertoire series since its inception in November of 1958. Because the list has grown so long, these updatings will not be published here this year, but will be available (for a limited time only) in booklet form. To obtain the booklet, send 25¢ to Deane Manning, c/o STEREO REVIEW, 1 Park Avenue, New York, N.Y. 10016. In these pages I will confine myself to a brief statement of the principles that underlie my critical procedure in the Basic Repertoire series.

1. Only recorded performances that are (or should be) readily available in record shops throughout the country are considered in the comparisons. Availability, of course, varies widely from one locale to another, but listings in the Schwann catalog and the most recent supplementary catalog are my sources for determining the general availability of discs; similarly, the Harrison catalog serves as my guide to available reel-to-reel tape performances.

2. My judgments, of course, reflect my own tastes and my conception of what a performance should accomplish. I feel that the performer is given a sacred trust: he must distill a musical masterpiece through his own psyche and experience, and yet reveal it to the listener as a timeless and universal work. I am therefore not so much concerned with a note-perfect rendering of the printed score as I am with a direct and passionate communication between performer and listener. It is this elusive quality of communication that so often informs the performance of the vernacular music of our time but is so rare in the performance of symphonies, concertos, and the like—and even rarer in the recording studio than in the concert hall.

In every case where a satisfactory reel-to-reel tape version is available, I indicate a choice of this kind in the booklet. Many of these selections are, of course, available in other tape configurations as well, most notably cassette, but I have chosen not to list these because, as a rule, they do not yet come up to the high sonic standard of discs and reel-to-reel tapes.

For the many readers who have written to me over the years asking for reprints of the original versions of the Basic Repertoire articles, I am happy to report that my book 101 Masterpieces of Music and Their Composers (Doubleday, $8.95), is available in book and music shops and departments throughout the country. It contains greatly expanded historical and analytical material on the Basic Repertoire works, along with biographies of the composers, a glossary of musical terms, a checklist of recommended discs and tapes, a bibliography, and a complete index.
SR-RF935—FM/Multiplex Converter Converts your AM car radio to an AM/FM multiplex radio in minutes. Automatic stereo switching, FM beacon light, tone and volume control to blend stereo broadcasting to perfection. Easily mounted under dash or almost anywhere in your car.

PM-158 Amplifier Ideal for all uses. 30 watts music power (IHF). Pre-amped for magnetic cartridge, tape in and out, switched AC outlet, Up-front headphone jack. Walnut-finished wood cabinet.


SR-207—Budget-priced Stereo Receiver 30 watts (IHF) power. FM sensitivity: 2.5 uV. Pre-amped for magnetic cartridge. Taps for X'tal phono, tape in/out.

T-391DK—8-track Record/Playback Deck Selector switch allows choice of programs to be recorded. Complete record or stop after program 1, 2, 3 or 4. Pause and F. F. control. A.L.C. recording system. Wow and flutter below 0.25% RMS. A perfect match for all Standard amplifiers and receivers.

T-180DK—Stereo Cassette Record/Playback Deck Super dynamic noise suppression system. Bias switch for high fidelity tape and chromium dioxide tape. Automatic record level control. Automatic shut-off of AC or cassette. Wow and flutter below 0.2% RMS. Vu meter accurate to 2 dB at 0 Vu. Frequency response 30 to 15 KHz — 1dB.
SR-500—Stereo Receiver IC for all audio stages, FET'd front end, 15/15 watts RMS (8 ohms). Dual speaker system selector, Hi filter, FM muting, tape monitor controls. Large tuning meter. Black-out dial face. Walnut-finished wood cabinet included.

SR-1500 AM/FM Stereo Receiver 40/40 RMS (8 ohms). FM sensitivity: 1.8 uV (IHF). THD: less than 0.2%.


SR-4500 AM/FM Stereo Receiver 100/100 RMS (8 ohms). FM sensitivity: 1.5 uV. THD: less than 0.3% at rated output. Separate pre and main amplifiers, lever-action controls for Hi and Low filters, tone cancel, loudness, tape monitor, FM muting, audio-muting. Dubbing in and out, microphone jack and mixing control. Walnut-finished wood cabinet. Much more.

You've seen stereo receivers selling for next-to-nothing. And others costing thousands. Two basic elements are largely responsible for the difference. The performance features. And the "niceties." Performance features include IHF sensitivity, S/N ratio, THD, frequency response, capture ratio and the like. All are important variables that alter both the sound and the price.

If you're on a budget, sound should be your only consideration. If the sky's the limit, it should be your major consideration. Standard's receivers all accentuate the sound. And some also provide the extras for those who want them. Whether you plan on spending $50 or $600 or something in between, we can offer you many sound reasons for choosing Standard. Write us for the name of your nearest Standard dealer. Then come in and hear us out.

*Prices may vary slightly in different locations.

STANDARD RADI0 CORP., 60-60 39th AVENUE, WOODSIDE, N.Y. 11377; 13518 SOUTH NORMANDIE AVENUE, GARDENA, CALIF. 90249.

To $600
Hirsch-Houck Laboratories conducts a slightly seasonal survey and comes up with a

BUYERS' GUIDE TO PORTABLE FM RADIOS

By JULIAN HIRSCH

With summer coming in again, now is the time to think of the beach, picnics, traveling, or simply relaxing in the sand. And whatever the plans you may be making for the season, music—say, from a good portable radio—can and should be a part of them. If you are a regular STEREO REVIEW reader, you have more than likely pampered your ears to the extent that no tinny, distorting substitute for your home installation can satisfy you for long. If good sound quality is the first consideration, then your summer portable must be FM: not only will it have greater fidelity potential than AM to start with, it will also deliver sound that is free of atmospheric noises (static), interference, and fading.

Sound quality, of course, is not the only consideration in selecting a portable radio. If it is to be carried about frequently, it should obviously be small and light. Small size and light weight are not to be gained without sacrifice, however: many of the very compact radios are both relatively insensitive and limited in audio power output, and these could be serious disadvantages in remote areas. On the other hand, if you are within 20 miles or so of the FM transmitters, almost any portable radio is likely to be sensitive enough.

Keeping these, and other, requirements and considerations in mind, we set out recently to discover at first hand what kind of performance could be expected from today's portable FM radios. We evaluated fifteen models from twelve manufacturers, in a list-price range from $22.95 to $159.95. Obviously, this is a relatively small sampling of the many units available, but it is fairly representative of the range of features and performance typical of the field. There are probably other brands and models that are equal in performance to the top models we tested, but we simply could not evaluate every FM portable on the market—no one could. A number of portables are also available with a cassette recorder/player built in. These were excluded from this survey because they introduce so many more—and more complicated—test factors. (For those readers interested in our test procedures on this project, these are discussed in...
First things first in the case of these portable FM radios means the physical aspect, and since we had to unpack them from their shipping boxes, their weights came first to our attention. Some of the sets were quite light (under 4 pounds), and others (weighing from 4½ to 5½ pounds) might be called middleweights. These are about the largest radios we would care to carry about for any length of time. Units in the heavyweight category weighed in at from 7 to nearly 13 pounds; they are "portable" principally by virtue of having carrying handles and being able to operate on batteries. Many of the large radios also offer short-wave reception, which may be of interest to some listeners. The short-wave sensitivity of all the sets was adequate to receive the more powerful stations in Europe, South America, Africa, and Asia.

The Lafayette Starfire VI, Sylvania, and Realistic 673 can receive the U.S. Weather Transmissions broadcast 24 hours a day on 162.55 MHz (FM). This service covers the coastal areas of the United States as well as many inland locations, and it should be a useful feature for many readers, particularly boating enthusiasts. However, in many locations, reception of the weather stations may be marginal.

The Sylvania unit has two VHF bands as well—one from 108 to 135 MHz (AM) for eavesdropping on aircraft-to-ground communications, and the other from 152 to 174 MHz (FM) covering mobile (taxi, police, and business) communications as well as the weather transmissions. The set performed well on both bands and some interesting diversion. The Lafayette Starfire VI, which had the most extensive short-wave coverage of the group tested, also tunes from 147 to 176 MHz (FM). Although we did not do an in-depth evaluation of the AM reception of these sets, we judged all of them to have satisfactory quality and performance on the standard AM broadcast band.

Designing a radio for portable use entails some basic compromises in performance in addition to those limitations imposed by the intended selling price. The most significant deficiency is in audio-power output. The current drawn from the radio's batteries (and thus their operating life) is directly related to power output. Most small FM radios have a maximum power output below a quarter watt, and even the most powerful of them can deliver only 1.5 to 2.5 watts. The useful life of the batteries, which is strongly affected by how loud the radio is played, can usually be extended several-fold by operating well below maximum volume levels. The performance available from the amplifiers in these radios is certainly not comparable to that of the amplifiers in the most rudimentary of home music systems. This is not as serious a problem as it might at first seem to be, since the built-in loudspeaker is usually the real limiting factor on audio quality.

The smaller FM portables usually have a single speaker from 2½ to 4 inches in diameter, or an oval speaker of equivalent cone size. Although it is possible to achieve remarkable bass performance from speakers with these dimensions, it does take a low-efficiency speaker of relatively expensive construction mounted in some form of enclosed cabinet. Neither of these requirements is compatible with the economics of portable-radio design. The only way to get reasonable volume from a small, essentially un baffled speaker and a low-power amplifier is to use a high-efficiency speaker, and in portable-radio practice this means high mid-range efficiency, with most of the lower frequencies being sacrificed.

Two of the radios in this study had considerably larger speakers than the others: the Tandberg, with a 5 x 9-inch oval, and the Nordmende "Exec," with a 5 x 7-inch oval. The Nordmende Stereo had two 4 x 6-inch ovals, which together provide much the same output level and response as the Exec—plus the benefits of stereo. The Lafayette Starfire VI had two 2½ x 4-inch oval speakers which produced more undistorted volume than any of the other radios, but nonetheless did not seem to have any better bass response or overall tone quality.

Most of the radios could produce reasonably undistorted sound down to about 150 Hz. Only the Nordmende went appreciably lower, with a measurable fundamental output in the 50 to 100-Hz range. The Tandberg had a powerful subjective bass response, and since its bass control provided both boost and cut, it was possible to achieve excellent bass balance. However, it was sometimes necessary to turn the bass tone control down when the program material had appreciable content in the 90 to 130-Hz region because of the cabinet and speaker resonances.

Most of the radios had adequate high-frequency response, audible to between 10,000 and 15,000 Hz, though it was not really strong at the highest of these frequencies. Both Nordmendes had considerably better highs than any of the others, and excellent overall balance as well.

Most of the radios had some type of "tone control." In several sets it was in the form of a single switch that rolled off the high frequencies starting between 1,000 and 2,000 Hz. We rarely found any need for such a roll-off. Other portables had a knob or slider control performing the same function in a smoothly adjustable manner. A few sets had separate
bass and treble tone controls, and these had to be turned up fully for "flattest" response. The Lafayette 01929L was the only set in the group with no tone control. Our experience with these portables is that most of the time you need all the "tone" you can get, so that the usefulness of the tone controls—which usually offered frequency cut but not boost—was questionable at best.

The Sony unit was unique in being a single-unit stereo portable—without "wing" or extension speakers. A three-speaker acoustic-matrixing system is used, and the spatial perspective provided (the stereo speakers have a center-to-center spacing of only about 7 inches) is nothing less than astounding—enough, in fact, to change its rank in the listening tests from merely ordinary in mono to among the best of the group in stereo.

The Nordmende Globetraveler Stereo was a more conventional stereo radio, with two small oval speakers housed in 7 x 9 x 2 inch plastic cabinets that swing out for a center-to-center spacing of 21 inches. At the fairly close listening distances commonly used with portable radios, this is sufficient for a satisfactory stereo effect.

The FM tuner performance of a portable radio is limited by economics rather than technical factors. Not surprisingly, the more expensive units tended to be more sensitive and selective than the lower-priced models, although there were some exceptions. Only one—the Tandberg—had FM reception that we judged comparable to that of a good home FM receiver. It was so far superior to any of the others in respect to sensitivity, limiting effectiveness, and image rejection that we decided to make a side-by-side comparison between it and a high-quality stereo receiver having a measured IHF sensitivity of 1.7 microvolts. The receiver was operated on an indoor folded-dipole antenna; the Tandberg, placed on top of it, used its own vertical whip antenna. We received thirty-nine stations with good quality with the receiver, and found that every station was received equally well—without noise or interference—by the Tandberg.

The Nordmende, Grundig, and Sony radios also received thirty-nine stations, but some of them were accompanied by noise to the degree that they were not of listenable quality. To put the matter into perspective, the least sensitive receivers in the group received twenty-three to twenty-four stations under the same conditions. In well-populated areas, any of the radios would receive enough stations to be useful; in remote areas, the Tandberg has no equal among those tested.

Most of the portables tested had built-in a.c. power supplies. The line cord was sometimes permanently attached and stored within the case when not in use. With other sets, the line cord was meant to be unplugged from the set—an invitation, it seems to us, to misplacement or loss. The line-cord storage compartments (in those sets that have them) vary widely in size and convenience. Some of the sets used an external power supply for a.c. operation. These power supplies are small 2-inch cubical units which plug into a wall socket either directly or through a short cord, and they have an output cable that then delivers the proper d.c. voltage to the radio itself. This type of power supply is an extra-cost option, and is not quite as convenient as a built-in power supply.

Battery installation was a simple matter with any of these radios. As the accompanying data table shows, the cost of battery operation varied over a wide range—a factor of 10 from top to bottom. This has little to do with the audio power available, since the more powerful sets operate from high-capacity "D" cells and the smaller ones use "C" cells or even "AA" (penlight) cells. The differences in price between the various cells are small compared to their stored energy. This explains the somewhat higher operating cost of the Grundig, which is no more powerful than the other top-rated sets, but uses the smaller "C" cells. It is therefore considerably lighter than its close competitors. If alkaline cells are used instead of the usual carbon-zinc cells, the battery-use life for portable radios may be extended by as much as 100 per cent. Since alkalines cost two to three times as much as carbon-zinc cells, there is convenience but not much economy in their use.

Having lived with and used all of these portable radios for some time, we have naturally formed some fairly definite opinions about their relative performance. The order in which they are listed in the table of specifications is our estimate of their overall quality. Price or size did not enter into the ranking.

The Tandberg had by far the best FM performance, and this was combined with excellent audio quality. Its image rejection, from 10 to 30 dB better than the other radios, could make it the preferred choice for use near an airport or under the approach or take-off paths around an airport. Both Nordmendes, although not quite as sensitive in FM reception, had easily the best sound of any of the sets tested. The Nordmende Exec (together with the Panasonic and the Lafayette Starfire VI) had excellent alternate-channel selectivity. If you live in a populous area and regularly listen to a station only 400 kH removed from another powerful station, this is an important consideration (to our surprise, the Nordmende Stereo proved to be inferior to the Exec in...
Three of the top performers in the tests illustrate the range of styling and design schemes to be found among portable radios. They are the AM/FM Grundig TR-305 (left), the AM/FM, middle, and short-wave Nordmende Exec. (center), and the AM/FM Panasonic RF-759.

The Tandberg's large 5 x 9-inch speaker (upper left) had much to do with the unit's superior sound. Its carrying handle serves as a rest when the radio is tilted to show the controls (lower left). Some of the tone controls bore unexpected labels: the JVC (upper right) has a nine-position slider marked "Creative Sound." Its combination tuning/battery-condition meter is shown at lower right.

Most of the radios could operate on a.c. power drawn directly from a wall outlet. The Nordmende Exec (far left) can be operated on both 110 and 220 volts. The Lafayette Starfire VI (near left) requires an external adapter.
## COMPARISON CHART—PORTABLE FM RADIOS

<table>
<thead>
<tr>
<th>MAKE &amp; MODEL</th>
<th>DIMENSIONS (to nearest 1/8&quot;)</th>
<th>WEIGHT</th>
<th>BATTERIES</th>
<th>A.C. SUPPLY</th>
<th>EARPHONE SUPPLIED</th>
<th>FM SENS.</th>
<th>AUDIO QUALITY</th>
<th>CAPTURE RATIO</th>
<th>FLUTTER REJECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H”</strong></td>
<td><strong>W”</strong></td>
<td><strong>D”</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tandberg TP-41</td>
<td>7/4</td>
<td>10/4</td>
<td>3/4</td>
<td>5.8</td>
<td>6-D</td>
<td>NA</td>
<td>A+</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Nordmende Stereo</td>
<td>9</td>
<td>14</td>
<td>5/4</td>
<td>12.13</td>
<td>6-D</td>
<td>INT</td>
<td>A-</td>
<td>A+</td>
<td>A</td>
</tr>
<tr>
<td>Nordmende Exec</td>
<td>8/4</td>
<td>14</td>
<td>4</td>
<td>9.3</td>
<td>6-D</td>
<td>INT</td>
<td>A-</td>
<td>A+</td>
<td>B</td>
</tr>
<tr>
<td>Grundig TR-305</td>
<td>6/4</td>
<td>10</td>
<td>3</td>
<td>4.12</td>
<td>6-C</td>
<td>EXT ($6.95)</td>
<td>NO</td>
<td>A-</td>
<td>B+</td>
</tr>
<tr>
<td>Panasonic RF-759</td>
<td>7</td>
<td>9/4</td>
<td>3/4</td>
<td>4.12</td>
<td>4-C</td>
<td>INT</td>
<td>C+</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Sony MR9300WA</td>
<td>6</td>
<td>10/4</td>
<td>5/4</td>
<td>5.12</td>
<td>4-D</td>
<td>INT</td>
<td>B</td>
<td>C-</td>
<td>B+</td>
</tr>
<tr>
<td>JVC 8204</td>
<td>5/4</td>
<td>8</td>
<td>2/4</td>
<td>2.12</td>
<td>3-C</td>
<td>INT</td>
<td>B+</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Lafayette Starfire VI</td>
<td>10</td>
<td>12/4</td>
<td>4/4</td>
<td>8.0</td>
<td>4-D</td>
<td>EXT ($4.95)</td>
<td>NO</td>
<td>C+</td>
<td>B</td>
</tr>
<tr>
<td>Sylvania TR-144</td>
<td>7/4</td>
<td>11/4</td>
<td>3/4</td>
<td>7.2</td>
<td>4-D</td>
<td>INT</td>
<td>C</td>
<td>B+</td>
<td>B</td>
</tr>
<tr>
<td>Magnavox 1212</td>
<td>6/4</td>
<td>10</td>
<td>3/4</td>
<td>5.9</td>
<td>4-C</td>
<td>INT</td>
<td>D</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>Realistic 673</td>
<td>6/4</td>
<td>9/4</td>
<td>4</td>
<td>4.9</td>
<td>4-C</td>
<td>INT</td>
<td>D</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>RCA RZM177</td>
<td>6/4</td>
<td>9/4</td>
<td>3</td>
<td>3.12</td>
<td>4-C</td>
<td>INT</td>
<td>D</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Hitachi KH-1055</td>
<td>6</td>
<td>8/4</td>
<td>2/4</td>
<td>3.8</td>
<td>4-C</td>
<td>INT</td>
<td>D</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Realistic 676</td>
<td>5</td>
<td>8/4</td>
<td>2/4</td>
<td>2.3</td>
<td>4-AA</td>
<td>INT</td>
<td>D</td>
<td>C</td>
<td>B+</td>
</tr>
<tr>
<td>Layfayette 01929L</td>
<td>5/4</td>
<td>9</td>
<td>3</td>
<td>3.2</td>
<td>4-C</td>
<td>INT</td>
<td>C</td>
<td>C-</td>
<td>B</td>
</tr>
</tbody>
</table>

*Since much of our raw numerical data could not be interpreted by readers, we have rated certain key aspects of performance with letters as in the customary scholastic rating system: "A" is excellent; "B" is good, "C" is fair, and "D" is poor. Note that these are not comparable with the above performance ratings.*

this respect). The Grundig falls just behind the Tandberg and the two Nordmendes in overall performance, with the Panasonic ranking next. The Panasonic had the best alternate-channel selectivity of any of the radios tested; the Grundig was exceptionally sensitive and had an audio quality ranking close to the top of the group. Any of the top five, we feel, would be highly satisfactory from the listening standpoint. The Grundig and Panasonic are also both small and light enough to be carried, even by a child.

To provide an additional frame of reference for buyers, we made listening comparisons between several of the top-ranking portable radios and a highly regarded a.c.-operated FM radio (the KLH 21). We judged that the Tandberg and both Nordmendes were quite comparable to the KLH 21 in sound quality (and the Tandberg, at least, is considerably more sensitive). The Grundig also came very close to matching the performance of the KLH 21, lacking only a little of the extreme low- and high-end frequency response. None of the other portable radios sounded in any way competitive with the KLH in sound quality.

The Sony earned an ambivalent rating. It was a good performer in mono FM reception, but with an audio quality no better than the average for this group. In stereo, its sound quality caused it to be ranked with the best. The JVC is an all-round excellent performer, among the smallest and lightest of the group, with sensitivity and audio quality very close to that of the better sets.

We would lump the Lafayette Starfire VI, Sylvania, and Realistic 673 together as concerns sound quality and general features. It is noteworthy that the
Lafayette and Sylvania have the lowest operating cost of any of these radios. The Lafayette also has the highest acoustic output, which is an interesting and unexpected combination of features. The Lafayette further has excellent alternate-channel selectivity, ranking in this respect just behind the Nordmende Exec. The Magnavox is comparable in general performance and sound quality to this group, but it lacks their additional tuning ranges. The Realistic 673 image rejection is better than that of any other of the radios except the Tandberg.

The RCA, Hitachi, Realistic 676, and Lafayette 01929L can be ranked together in most respects. Hitachi has the convenience of three pre-set FM channels which can be selected by pushbuttons, in addition to the usual manual tuning. The RCA, Hitachi, and Lafayette have very good image rejection, and rank just behind the Realistic 673 in this respect.

Basing our judgment on the manufacturer's list prices (and these vary all over the lot in actual retail practice), we would consider the Grundig and Panasonic radios to be the "best buys" among the sets tested—which, of course, is not the same thing as the very best. Both offer substantially better sound or FM-tuner characteristics than most of the other sets carrying the same (or nearly the same) price. The JVC follows closely behind, being slightly deficient in bass response.

Obviously, considerations other than performance will influence one's choice of a portable FM radio, but whether your requirements are minimal or highly exacting, this brief study should give you an idea of what to expect in this class of equipment and perhaps help to narrow down the field of choice as well.
The Domestication of Mary Travers

By Sandra Shevey
On April 22, Peter, Paul and Mary performed together for perhaps the last time. Over 250,000 people who had gathered in Washington for the anti-war rally listened intently to the songs that had led them through Selma, had helped them endure the tragic death of the Rev. Dr. Martin Luther King. The group sang Blowin' in the Wind with the same guts and conviction with which they performed it in 1962. Tall, lanky Mary Travers threw back her head; she slouched her shoulders, she swiveled her hips. The voice was nasal, New Yorkish. The distaff Dylan got it on: "How many miles... How many times!" A CBS news commentator ironically described her Civil Rights protest as "gentle." Today, just nine years after Selma, is Mary "nostalgia"?

On a ten-acre weekend retreat in suburban Connecticut—which Mary shares with her husband, four adorable kids, and a sloppy fat cat named Sam—the folk singer escapes from the angry demonstrations and the money-hype of the music business. Her rustic clapboard house, built in 1784—high-beamed ceilings and stone fireplaces—is filled with American pewter pots, copper kettles, and antique glass jars (no seams). Wooden cupboards closet an automatic washer and drier, a larder stocked with butter, sugar, milk, and honey. The delicious scent of pine fills the room. Mary looks as I remember her looking at college concerts: candid, simple, and direct, the independent prophetess who broke popular-music tradition in the Sixties by assuming the male role—the wanderer, the itinerant musician—in Bob Dylan's Don't Think Twice and John Denver's Leaving, on a Jet Plane. Mary's straight blond hair falls casually on her broad Nordic shoulders, which are covered with a fuzzy white mohair sweater. The image is one of unadorned femaleness, much the same quality that Raphael Soyer captured in the portrait of Mary that hangs above the fireplace. Mary's burly husband Jerry Taylor, outfitted in a blue-denim army jacket and cowboy boots, greets a neighbor (he has an American flag stitched on his shirt) who is bringing home Alicia, Mary's five-year-old daughter by a previous marriage.

The world can change radically in a decade. In 1960 Mary Travers was a leader in the fight for civil rights. Today she feels alienated from the hippies and the militants. Folk purists then reviled her music as eclectic and slick ("I suppose that's because we went in and came out at the same time"), and Mary feels much the same way about the anti-performances of James Taylor and Nina Simone today. ("They walk offstage in the middle of a concert and you say to yourself, 'Well, that's an interesting piece of anarchy.' ") Mary is put off by the whining, self-pitying lyrics of today's writers ("I can't relate to Melanie's Nickel Song because I don't feel put down by society"), and is disturbed by the dearth of strong, literate writers such as Pete Seeger and Bob Dylan ("there's nobody writing The Times They Are a-Changin', If I Had a Hammer, or When the Ship Comes In.").

Has the goddess of liberalism crystallized on the shelf? The lady with the sunshine smile and the sky-blue eyes admits that she feels "a certain 'generation gap' with young activists," but that she continues to address herself to the liberal "mentality." She explains: "Having grown up in Greenwich Village, I always felt a grace about bohemians, an unself-consciousness as opposed to the defiant self-awareness of some hippies. In the 1940's a bohemian could make it past 14th Street without having cardiac arrest. One's clothes and life-style were developed out of one's idiosyncrasies, not to be a culture."

Mary's disenchantment is revealed in the apolitical, less abrasive tone of her first solo album (which has sold over 100,000 copies just a few months after its release). More personal than political, more dulcet than strident, it is an insular Mary we meet here, concerned about purifying her own turf, her special little world. She is a lone lady sitting on a mountaintop singing about things near and dear to her. Her voice caresses (rather than bites) John Denver's lyrics about Rhymes and Reasons and a tone poem she composed about her eleven-year-old daughter Erika ("Like some child I turn with care/When viewing you on step or stair."). Says Mary, "There's a tremendous predilection among parents to think of children as a form of personal property. To me, motherhood is a standing away and saying, 'It's a separate person whom I adore, love, want for, but I'm over here watching her ascend through life,' and 'I turn with care.' ") The old Mary does not consider the new Mary a copout. She insists that Rod McKuen's Children One and All or Ewan MacColl's The First Time Ever I Saw Your Face are just as much about love between the races and the sexes as between mother and child.

Mary picks up the Sunday morning newspapers and clears away the breakfast dishes. A happy and fulfilling marriage ("love is a celebration") is responsible too for lyrics less shrill. The folk singer met her lumbering husband when the Chicago-based writer came to New York City to interview her ("Because I never said anything in the trio, he wondered whether or not I could talk."). Taylor says that he became so engrossed in the non-stop, four-hour talk marathon that he never left. Mary laughs: "Actually, I was matchmaking for John Denver, who was reorganizing the Chad Mitchell Trio and needed
some publicity. I thought it would be a good story for Jerry, so I invited them both to a barbecue. At
the last minute John phoned to say he had to re-
cord some tapes, and Jerry said that he was on his
way. That was the beginning.

"When I met Jerry I was in the middle of analysis.
I was working out my problems—learning how to
think in a new way—and I would leave the doctor's
office to have dinner with Jerry, who'd ask, 'What
happened today?' And I'd say, 'We discussed some-
thing fascinating: the concept of the unwritten con-
tract—I decide what I want from you and you decide
what you want from me, and neither of us shows the
other the contract, so we're constantly angry with
one another for violating it!'"

Psychoanalysis helped Mary to be more outspoken
in her relationships—to tell people who she is and
what she wants. "Not just Jerry, but lawyers, ac-
countants, my business manager. When they became
condescending I was able to laugh and say, 'Hey,
that's a male chauvinist attitude and I won't take it,
especially if I have to pay for it.'"

Mary's "liberation" spurred her to tell off the guys
in the group. After nine years and nine gold LP's,
Mary let it all hang out—the suppressed fury, the
female rage. She told Peter and Paul that she wanted
to split. "The guys always asked me to look mystical,
aloof—to keep quiet. They felt there was an estab-
lished pattern to the concerts, and that the public
liked to see Mary as fire and ice. And in a group you
rationalize and say, 'what's good for the group...
...'. Toward the latter part of my analysis I said,
'Hey, fellas, I want to talk. Whether or not I'm mys-
tical, I would like to say things.' There is a truth to
that mysticism, and I'm sure it was attractive that
Mary never said anything. It's like being a pantomimist. It is easier to play a lot of different roles if
nobody knows who you really are. But the moment
you open your mouth, you deliberately define your-
self. But at a certain point, you say mysticism be
dammed. It's more important for me to articulate my
feelings than for the audience to indulge themselves
in what is basically a destructive social wish on their
part."

DESPITE Mary's new awareness and assuredness,
she is terrified at the prospect of giving a solo con-
cert. When daughter Erika brings up the subject
over lunch, Mary changes it quickly. Sheer panic im-
peled her to choose Vancouver, B.C., for her April
debut because (as she confided to a close friend),
"That's the most outrageous place I can think of.
Who will come?" Mary softens the comment: "Actually,
big-city people think that they're more sophisti-
cated, and their attitude is 'Show me.' People in
more rural areas have a tendency to say, 'Gee, I'm
going to a concert tonight, and we're going to have
such a good time'."

Talking about the tour reminds Mary that she'll
have to leave her husband and the kids behind. She
grows pale. "I go on the road for four days, then
come back for three," she rationalizes. "I work when
my kids work. I'm home when they're home." Yet
it's a less aggressively independent Mary who plays
the wandering minstrel (on her new album) in John
Denver's Follow Me (a song he wrote for his wife)
or Elton John's Indian Sunset ("I had to change gen-
ders so it wouldn't come out with me taking my
pony, my child, and my 'squaw' ").

Four ruddy-cheeked little faces press against the
window panes. Mary Supermom hurries outside to
join them—to plant some bulbs before the sun goes
down. A green and white ecology flag waves in the
breeze. Mary surveys the garden—the green shoots
peeking up from beneath rich brown soil. "Funny
thing about plants," she says, "they grow any-
where—around the rocks and right through the
leaves."

Sandra Shevey, a young writer who focuses on the current
musical picture, has written for both the New York and Los An-
geles Times and has a book about to come out on Rock Mommas.
The Sound of MARY TRAVERS

by NOEL COPPAGE

Several years ago I was in Louisville, which happens to be Mary Travers' home town, for a Joan Baez concert and a visit with an old college friend. "You should have been here a week ago," he said. "You could have heard a real singer. That Mary's voice penetrated into the night air clear as a goddam bell!"

There was awe in his voice, and I had not heard him so eloquent since the night we two, disguised as nervous juniors, took the pinball machine in the White Tray Restaurant in Bowling Green for $32.20.

A lot of nickels have gone down the chute since then. Mary Travers spent a full ten years with Peter and Paul, and since then. Mary Travers spent a

"You should have been here a week ago," he said. "You could have heard a real singer. That Mary's voice penetrated into the night air clear as a goddam bell!"

There was awe in his voice, and I had not heard him so eloquent since the night we two, disguised as nervous juniors, took the pinball machine in the White Tray Restaurant in Bowling Green for $32.20.

A lot of nickels have gone down the chute since then. Mary Travers spent a full ten years with Peter and Paul, and theirs was an exceptionally resilient act in a tough business. At first, they passed for more or less authentic folk-pretty practitioners, but the folk purists toyed with smobishness, decided they liked it, and soon labeled Peter, Paul and Mary a plastic group of the Kingston Trio ilk. For a while, then, Peter, Paul and Mary records were bought mostly by high-school kids attracted to the pretty sounds—until rock and folk-rock came in. But the trio adapted easily and had succeeded more good years.

Whatever the image, it was always Mary who made the trio go. Her voice really did penetrate the nocturnal mist. It still does; I cannot detect any significant change in it over the last decade. It has power, authority, and a basic tone that just naturally sounds attractive to almost everybody.

Some voices—Mahalia Jackson's, or Buffy Saint-Marie's—are like rhythm instruments, and their tone or timbre is subordinate to the quavering up and down to which they subject the melody. Technically, they distort the melody, but (usually) they compensate for that in other ways. Mary Travers' voice is like a woodwind instrument, delivering the melody pure and unobstructed, the voice depending on the relationship of basic tone to overtones—the quality of its timbre—for most of its appeal and for all of its uniqueness.

Mary's delivery includes a vibrato so subtle as to be all but inaudible, except perhaps subliminally. When she does use ornamentation, hopping above the score to stretch out the meter, as in 'goin' nowhere' at the end of John Denver's 'Circus,' she is slow and obvious about it. No trickery is attempted. She gives the illusion of having great range, and it may indeed be pretty great, but she rarely sings a song containing very high notes. One of her major strengths is that her voice sounds good all the way up—as high as she has to go, anyway—and all the way down—and she can go pretty far down.

Her ability to deliver the long, unbroken melodic line is an important one in singing folk or folk-like material, and it makes life easier for arrangers, providing a lead 'instrument' free of quirks that must be worried about. Mary needs a heavy bass beat, I think, because her voice is low-pitched and because its continuous, seamless effect needs the contrast. The arrangements in her new Warner Brothers album (all but one by Lee Holdridge) sometimes provide it and sometimes don't. The dated 'Tonight Show Orchestra' approach to 'I Wish I Knew How It Would Feel to Be Free,' with horns blaring and organ sounds percolating through, is a distraction and a bore—particularly when one is trying to hear how Mary handles this kind of song, which is not the kind she usually sings.

To be fair, I've never heard a good arrangement of the song, and have no idea what should be done with it, except that someone should throw out all the old ideas and start from zero.

Mary attacks the song, at any rate, and masters it with surprising ease. It's difficult to believe this torch singer could then turn around and be so impressive as a Judy Collins folkie type with 'I Guess He'd Rather Be in Colorado,' one of the delights of the album. But the song, by Bill Danoff and Taffy Nivert, has one of those endings that make people squirm: "In the end, up in his office, In the end, a quiet cough Is all he has to show he lives in New York City."

Three of John Denver's best songs, Rhymes and Reasons, Follow Me, and Circus, are included, and they seem perfect for Mary, especially Follow Me, which she moves along at a precise pace and which seems to need only the very best part of her range, the upper-middle honey-golden part. Holdridge put together sparkling arrangements for Rhymes and Reasons, bringing in a harpsichord, and Follow Me, with a batch of strings making a subtle understatement and some tasteful guitar work closer to the mike. (The latter may be by Denver himself, who plays back-up guitar on some of the other songs.

Most of the songs are well chosen, and the album itself is well balanced, charting its mood and pace often. Circus is followed by Paul Simon's 'Song for the Asking,' with cellos backing Mary, and that by Elton John's and Bernie Taupin's 'Indian Sunset,' with woodwinds and a piano supporting a loose but appropriate arrangement. It was during this song that I first thought Mary had resolved a minor complaint I'd harbored for years—that she was a bit too cool toward her material—but then I listened to 'Follow Me' again and decided maybe that was where she made the emotional breakthrough, and then I listened to 'I Wish I Knew' again and so on. Somewhere, sometime, she has become more involved with her songs, and I like that.

There are, of course, a few kernels that don't go down so easy. Rod McKuen's 'Children One and All' has practically no melody and so is a waste of time for a masterful deliverer like Mary. The melody she imposes on 'The First Time Ever I Saw Your Face' (which has had so many melodies imposed on it that perhaps nobody knows how it is supposed to go—something like the story that ends with the last of several erratic outbursts saying 'You guys have got left field so screwed-up nobody can play it') is not the prettiest melody I've ever heard imposed on it. But these are matters of taste—they don't seriously mar the record, and they have little to do with the talent of Mary Travers.

On that subject, I think the record will confirm my pinball buddy's claim that Mary Travers is one of the most competent female vocalists in the business, with a voice as strong as a Mack truck, as pretty as a morning glory . . . and, all right, as clear as a goddam bell.

Mary TRAVERS: Mary. Mary Travers (vocal); various musicians, Lee Holdridge and Milt Okun art. The Song is Love, I Guess He'd Rather Be in Colorado; Children One and All; The First Time Ever I Saw Your Face; I Wish I Knew How It Would Feel to Be Free; Rhymes and Reasons; Follow Me, On the Path of Glory; Circus; Song for the Asking; Indian Sunset. WARNER BROS. WB 1907 $4.98, © AMPEX M 80197 $6.95, © M 50197 $6.95.

JULY 1971 65
The Rum-Tum-Tum of the Military Drum
and a few other irreverent thoughts on martial music

By Aram Bakshian, Jr.

When did it all begin? Perhaps in Chapter Ten of the Book of Numbers, where the Israelites were exhorted to make two trumpets of silver, "that thou mayest use them for the calling of assembly, and for the journeying of the camps." This matter-of-fact passage from the Old Testament is certainly one of the first written references to an ancient but neglected relationship in the musical family: music and the martial life. We know that it existed in one form or another among most nations of antiquity, and, if modern anthropologists' research among aboriginal tribes is any guide, primitive military music probably goes far back into the unrecorded past.

Martial music is very likely as old as war itself, and every bit as universal. Like war, it has been in and out of fashion, but, also like war, it has yet to make a final exit from the human comedy. Still, the tendency in recent years has been to lump it all together—the good with the bad—and banish it to artistic limbo as a sort of fascist Muzak. Although there is no denying that an awful lot of third-rate work has been done in the genre, this fate is a bit hard, considering the circumstances. As a very basic form of the art, martial music has usually been designed for the "masses" in the broadest (and often shallowest) sense. Too often, it has been easy to hum, easy to arrange and play—and easy for any intelligent music lover to dismiss out of hand without fear of censure by his peers.

In jingoist periods, it has had to reflect jingoism, and with a vengeance—witness the barrage of bilgewater ballads and maudlin marching songs turned out for Grade B conflicts like the Spanish-American War and the Boer War, not to mention the present Indo-China imbroglio. In the last case, it is hard to say which is worse, patriotic pap of the Green Beret school, or the pretentious whining and ranting of what passes for protest music in the popular recording industry (pity the art that becomes an industry!). At other times, though military music has been produced with depth and force, it has also been contorted by the hateful emblems it upheld. Such is the case with many of the impressive German contributions to the field. Even today, listening to Audio Fidelity reissues of recordings made at Hitler's massive Nuremberg rallies, one can feel the pulsing force of the music, and sense the fever pitch it generated. It is a profound sensation, but not a very pleasant one.

On the other hand, it would be hard to find a summation of a great era more perfect than the Marseillaise or, for that matter, Yankee Doodle. The exalted fire of the one and the limping yet jaunty air of the other encapsulate the spirit of two revolutionary epochs in a way no writer or painter has surpassed. All things considered, it can be argued that, with the possible exception of sacred music, martial music has
had the greatest social impact. More history has been made, more mobs swayed, more quarrels started and settled, more boundaries changed, more courage stirred, and more suffering endured to the crude accompaniment of bugle, fife, and drum than to that of all the orchestras and choruses in the world—a melancholy reflection on the nature of man.

Fanfares, flourishes, and marches have been the background music for the lion’s share of human history, and, like most background music, have often suffered artistically in order to enhance trite scenarios. Yet there are many truly memorable compositions in this genre, and it has attracted some of the best and most varied musical talents of all time. Mozart, Beethoven, Verdi, Elgar, Offenbach, the Strausses, Purcell, Handel, Bizet, and Gilbert and Sullivan are but a few of the oddly assorted immortals who turned their attention, at least in passing, to the march, for example, sometimes with brilliant results. Many an opera lover will recall Figaro’s booming “Non più andrai . . .” with fondness. Few of them, though, realize that it is one of the official marches of Queen Elizabeth’s First Foot Guards, and hummed as such by many a Cockney who is blithely unaware of Le Nozze di Figaro or of the genius who composed it.

Nothing delighted that thoroughly English gadfly, W. S. Gilbert, more than poking fun at military pomp and foolery (vide our title, taken from a line in Princess Ida). Most of his light operas have at least one character and several lyrics devoted to his favorite target. Yet the music, some of Arthur Sullivan’s best, is often stirring, and one is reminded that Gilbert, for all his sarcasm, was Deputy Lieutenant of the County of Middlesex, and a senior officer of militia! So often did Gilbert and Sullivan collaborate on martial themes that Angel Records once devoted an entire disc to their music as played by the Regimental Band of the Scots Guards (Angel 35625, now, unfortunately, deleted).

But the story of military music begins long before classical music of any sort existed. The ancient Egyptians and Greeks seem to have relied mainly on flutes, and their spotty combat records reflect this. The Israelites, a hardier race, used trumpets and rams’ horns, sometimes with spectacular results, especially at Jericho. It remained for the Romans, however, to organize military music along professional lines. As the legions of Rome trod the road to conquest in Asia, Africa, and Europe, they took with them rudimentary bands, consisting mainly of primitive brass wind instruments, cornicen, buccina, and tubicen. Like most things Roman, the bands of the legions were functional, used for signaling, but they also played an important role in the triumphal entries
The band of the Grenadier Guards, well known and immensely popular today, was the first military band in England, having been established in the year 1678.

of victorious armies returning to the Eternal City.

During the Dark Ages, music, along with the rest of the arts, entered a dormant period. Animal horns and bagpipes—rather appropriately—replaced the burnished instruments of the Romans, just as barbarian tribesmen replaced the crack legionnaires of earlier days. Gradually, however, the trumpet and associated brass came back into their own. By the time feudalism was in full swing, heralds and court trumpeters were established as key figures in ceremony and battle. Few rulers acted out their official duties, in peace or war, without the appropriate flourishes and fanfares.

When the flower of European chivalry (and a good selection of the weeds as well) launched the Crusades, military music took its next giant evolutionary stride. It received the first of two massive infusions from the East. Facing the armies of the Caliph, the Crusaders were struck by Moslem military music. Instead of a gaggle of tinny trumpeters, the Saracens had full bands of brass, reeds, and percussion. The awe-struck Crusaders adopted much of what they saw and heard, and it is from the Crusades that we can trace the first sophistication of European martial music.

Another basic development of the medieval and early Renaissance period is still with us today—fife and drum music. As music once again became a serious art, and notation was developed, a body of transmittable scores accumulated. As a result, the modern record collector can hear tunes to which Swiss pikemen and German Landsknechte marched and fought four and five centuries ago. This early marching music is rather sparsely represented on record, but at least two discs, both produced in Germany, include vintage selections, played in the style of the period with authentic instrumentation. The better of the two is "Militär-musik aus vier Jahrhunderten" (Military Music of Four Centuries) on the Fiesta label (FLPS 1367), featuring elements of the West German Army Staff Band. This album also includes some very good selections from the seventeenth, eighteenth, and early nineteenth centuries, including fanfares, marches, field music, and Zapfenstreiche (the German equivalent of the tattoo ceremony). The other recording, one of many curiosities scraped together by the Everest combine, is called "Three Centuries of Military Music." It is on the Pirouette label (JAS 19030) and features the wind ensemble of the Leipzig Academy. While it leaves much to be desired technically, it does provide an extensive sampling of early military music, along with compositions by such classic masters as J. S. Bach, J. B. Lully, Handel, Mozart, and Haydn, all in a military vein. Unlike the Fiesta release, which makes no pretense at being stereophonic, recent pressings of this one have been "electronically reprocessed"—and with dubious results.

So much for the Renaissance. It laid the groundwork for the next great step in the evolution of military music by establishing music as a transcribed art, and by clearing the way for the central monarchies and professional armies of the Age of Absolutism. The emergence of absolute monarchs and large dynastic states created a demand for government-subsidized pomp, circumstance, and music to make war by. At the same time, the grass-roots tradition of lo-
cal town bands (in Germany, the Stadtkapelle) kept the march and kindred music alive among the people, although one wonders about the quality of it, especially after dipping into contemporary sources. To cite a case, at the end of a visit to Cambridge in 1667, diarist Samuel Pepys departed from his inn to be greeted by a crowd of beggars, "and the town musique did also come and play, but, Lord! what sad music they made!"

In fairness to the "town musique," it should be pointed out that Pepys cast a jaundiced eye on most band music, preferring the lute, flute, harp, and chamber music. In an age when "the quality" served in at least one campaign at sea or ashore, he was very much a civilian bureaucrat with a lower-middle-class background, and this may have added to his animosity, so evident when, on visiting Whitehall, where Charles II prided himself on his band of trumpeters and drummers, "... I staid to hear the trumpeters and kettle-drums, and then the other drums, which are much cried up," sniffed little Pepys, "though I think it dull, vulgar musique."

If the Merry Monarch showed a love of music (a trait he shared with most of the royal Stuarts), his cousin Louis XIV made France the center of military and ceremonial music in the seventeenth century. The second infusion from the East occurred at this time, as a result of clashes with the Ottoman Turks. Officers from all over Christendom served in campaigns along the Danube and in the Morea, fighting the elite Janissaries, the backbone of the Sultan's army and masters of large, sophisticated military bands as well. The end product was what many musicians of the next two centuries called "Janissary Music": hautbois (oboe), bells, cymbals, "Jingling Johnnies," glockenspiels, and a generally livelier, more versatile sound. It is said that the first such reconstituted Janissary band was organized by a seventeenth-century king of Poland. This has been disputed by some historians, but it offers the aficionado of military music a chance to credit a much-maligned country with a rare historic first.

But it was in France that the expanded form really got off the ground. Louis XIV was a small man with a tremendous ego and a lot of pocket money to inflate it. He was the archetypal autocrat (at least in his own mind and his own household) and a born showman. He was also very big on military glory, although he made a point of always viewing it from a safe distance. Equally important, Louis could call on a number of very able Baroque musicians and composers to orchestrate his egotistical fancies. Lully, Delalande, Couperin, Mouret, and many others made the composition of fanfares, marches, and triumphal pieces a French national industry, and they did so with a grace, style, and facility that hover between master craftsmanship and true art.

Today they have been rediscovered thanks to the Baroque boomlet in recording, and an excellent sampler (one of many) is available on the Nonesuch label, entitled "Symphonies and Fanfares for the King's Supper" (Nonesuch 71009). The title is a little misleading, however: the two sides of this excellent record (performances by the Collegium Musicum of Paris) total less than forty-five minutes, whereas Louis, a royal glutton of the old school, ate on endlessly, his typical evening repast including "four plates of soup, a whole pheasant, a whole partridge, two slices of ham and a salad, some mutton with garlic, followed by pastry, and finished off with fruit and hardboiled eggs." I defy anyone to dispose of such gargantuan fare in forty-five minutes! Other
The Roman buccina (left) was one of the earliest military instruments. Adolphe Sax (1814-1894) invented one of the newest.

than this oversight, the Nonesuch album is fine, and the jacket has some useful notes by Edward Tatnall Canby, although he errs in explaining the title of Couperin’s La Steinkerque as “probably named for a patron or friend.” In fact, this trio sonata with military theme must celebrate the French victory over William of Orange at the Battle of Steinkirk on August 3, 1692.

While the courtiers at Versailles wondered how long King Louis’ digestive tract would hold up under the strain, England produced a classic march that is still popular, and the subject of a much more famous name controversy. For many generations this gem among marches was foisted off as a “Trumpet Voluntary” by Henry Purcell. Besides being popular as a harpsichord (its original form), organ, and chamber piece, it did yeoman duty for some years as the musical theme of television’s Hallmark Hall of Fame. The real composer was one Jeremiah Clarke (circa 1673-1707), a lesser-known artist than Purcell, but obviously a man of some talent, and the correct title of the piece is The Prince of Denmark’s March, written in honor of Queen Anne’s booby but good-natured spouse Prince George of Denmark. If the name doesn’t ring a bell, rest assured you will recognize the piece immediately upon hearing it, which you can in any number of classical albums.

To hear some of the music Pepusch played for his narrow-minded master (and also a good selection of later eighteenth- and nineteenth-century German military pieces), I heartily recommend a recent Telefunken release, “Marschmusik am Brandenburgisch-Preussischen Hofe, 1685-1823” (March Music at the Royal Court of Brandenburg-Prussia, Telefunken SLT 43104S). This is a first-rate disc technically, and the performance, in period style from original scores, is by the Sixth Military Music Corps, Hamburg, under the baton of Major Johannes Schade. Sehr gut!

Up to this point, military music was elaborate at court but simple in the field, where trumpets for the cavalry and fife and drum for the infantry still prevailed. Most regimental bands were small, manned by professional musicians (often foreigners of dubious reputation) and paid for out of the colonel’s pocket. They performed socially and at the officers’ mess, and they were segregated from the fifers and drummers, who were responsible for routine drilling and actual battle music.

It took another great historic convulsion to produce massive military bands for use in the field and among the common people. Beginning with the French Revolution and ending with Napoleon, Europe saw nearly a quarter century of war and a concentrated emphasis on all things military. The early French revolutionaries quickly realized that bands formed a useful part of crowd-pleasing fêtes. Soon they had fielded bands of as many as fifty musicians, performing in open-air patriotic rallies, playing songs and marches that echoed the propaganda line of the moment and urged the people on to further efforts pour la Patrie.

Whereas the American Revolution had been fought mostly without full bands (Mercury Records’
"The Spirit of '76," Mercury SR90111, featuring the Eastman Symphonic Wind Ensemble, gives a good sampling of American Revolution fife-and-drum tunes), the French Revolutionary and Napoleonic wars began the "big-band era" of military music. Both Music Guild ("Marche Militaire, Volume I," MS145, now withdrawn) and Nonesuch ("Military Fanfares, Marches & Choruses from the Time of Napoleon," 71075) have released recordings of this type, featuring the brass and percussion ensembles of the Gardiens de la Paix of Paris under the direction of Désiré Dondeyne. In England, Philharmonic Records, Ltd., produced a collection of late-seventeenth-to early-nineteenth-century military music that complements these two recordings and is of special interest because many of the instruments used are actually of the period. These include serpents (brass-reed instruments now mercifully extinct—once you've heard one, you won't wonder why), natural trumpets, hand horns, and kettledrums, all skillfully played by members of the London Bach Ensemble and conducted by Trevor Sharpe. "Military Music" (PLR. 0301) is the unpretentious title of this useful record, and it includes a four-page brochure of informative notes.

The size of a French gala band of the Napoleonic period reflects this dramatic growth. Whereas formerly a handful of musicians had sufficed, there were now as many as ten flutes, thirty clarinets, eighteen bassoons, four trumpets, eight serpents, two tubas, two trombones, twelve horns, and twelve percussionists. The effect, especially in the wind section, was massive but crude. This was remedied in part when, in 1801, the Viennese court trumpeter Anton Weidinger designed a keyed trumpet, and, in 1810, an Irish bandmaster named James Halliday invented the keyed bugle, making chromatic notes possible on those instruments. In the next few decades, the crude natural brass instruments of the band were refined, and some entirely new additions were made to the ensemble—notably the saxophone, invented by Adolphe Sax. With these technical innovations, and the new emphasis on massive size, band music came of age as a form, and it has changed little since (allowing for national and regional variations and passing stylistic fads). It had also entered a boom period that did not diminish until after the horrors of the First World War, when a general revulsion against warfare itself had its impact on the music of war as well.

A major force in the standardization and refinement of military music during this period was that starchy lover of "form," Queen Victoria. According to tradition, a great reform was sparked during the Crimean War when her army's massed regimental bands made a sorry attempt at playing God Save the Queen in unison. The results were so catastrophic that Victoria's Commander-in-Chief, the Duke of Cambridge, had all the bandmen booted into the corps of stretcher-bearers! When peace came, he secured the Queen's permission to establish the Military School of Music at Kneller Hall, an outstanding training facility that still exists, turning out bandmasters for the modern British Army and for countless fragments of the old Empire where British tradition has outlasted British sovereignty.

Present-day Kneller Hall has also contributed to military music on record, with several albums to its credit. Of particular interest is Nulli Secundus (the title is taken from the school motto, "Second to None"), on the Odeon label (PCLP 1730). This unusual record features a brief history of military music narrated by Lieutenant-General Sir Brian Horrocks, K.C.B., K.B.E., D.S.O., and so forth ad nauseam—an old soldier with a splendid Colonel Blimp voice that sounds like a cross between C. Aubrey Smith and the late Senator Dirksen at the height of his powers. The music is also worth hearing, and some
antique instruments are used. The narrative is accurate though much abbreviated, and the performance is first-rate.

Kneller Hall gave Victorian England an edge on the band market equaled by only one other European power—Germany. As she became military mistress of the Continent, Germany also led the field in band music, along with her island rival. British and German bandmasters led Yankee, Irish, Italian, and even Oriental and Latin American regiments on parade around the globe, usually with at least one strapping African drummer, complete with leopard skin and sometimes even a turban (an early example of typecasting for both leopards and blacks).

The American Civil War awoke the United States to the full possibilities of martial band music and has left us some of our enduring favorites on both sides of the Mason-Dixon Line. It also marked the emergence of the first large-scale American Army, with large bands. But America's greatest contribution to the field was the work of one man, of European origin, who achieved world-wide fame first as the director of the Marine Band, and then as leader of his own private band, which made a number of triumphal global tours.

John Philip Sousa, born in 1854, was both a talented conductor and a prolific composer. He has left his imprint on modern military music as no other individual has. He even lived long enough to be recorded (Everest 3260 contains remasters of some of his recordings) before dying in 1932. Several generations of American school-children learned Sousa marches by heart because they were played at the beginning and end of assembly periods as the pupils filed in and out of auditoriums. Many survived the ordeal without coming to hate the music, which is no small tribute to it. Verve, gusto, and a carnival atmosphere are the key words with Sousa, and these qualities are brought out well by the Goldman Band, which has made a number of LP's featuring Sousa marches.

Still, to the purist, Sousa marches seem a bit more appropriate on playing fields than battlefields or even drill grounds. They are just a little too festive and, while booming enough, lack a certain force. They have, however, set the tone for most of what came after them. As is so often the case, most of Sousa's heirs have managed to copy his weaknesses rather than his strengths, and there is a boundless insipidity to most modern marches, explained in part by the fact that many of them are not even written to be marched to—musical fish out of water!

Today, when soldiers no longer march into battle, and war, besides being unpopular, grows increasingly drabber and duller, the magnificent past of the military march is largely a tradition without a present. Only in isolated instances has its true character and full flavor been preserved. In America, while the regular service bands are excellent by strictly contemporary standards, one must look to the Army's Old Guard Fife and Drum Corps for the real thing as it figured in our early history. A number of small private groups also keep the memories alive.

Europe, with its richer traditions, can draw on a broader stream of living history. Anyone who has ever been to London in June to witness the annual Trooping of the Colours ceremony (when the Queen celebrates her official birthday, taking the salute from her Household Troops and a distinguished regiment) knows that military pageantry still lives, and, perhaps more surprisingly, draws record crowds. The Canadian government deserves credit too, for some very impressive tattoo ceremonies in recent years, and the kingdoms of Denmark, Norway, Sweden, Belgium, and the Netherlands, as well as tiny Monaco and the Vatican, all maintain some vestiges of the old pomp, with infantry and cavalry ceremonial units to escort and serenade their sovereigns. There are many recordings of the better-known units and events, including an excellent Vanguard version of the Trooping of the Colours featuring the Band of the Royal Artillery (Vanguard 2011), and a newer London Phase Four production (SP 44044) that effectively portrays a longer version of the same ceremony with the Grenadier Guards.

So, while the patient has lost strength, he is far from dead, and, to judge by the number of new releases that abound each year in America and Europe, someone out there is buying and playing the stuff at a brisk rate. All things considered, and politics and philosophy aside, few people can really resist a good march or a first-rate fanfare. Like Shakespeare, we respond with an often involuntary thrill to...

"... the neighing steed, and the shrill trump, The spirit-stirring drum, the ear-piercing fife, The royal banner, and all quality, Pride, pomp, and circumstance of glorious war!"

... especially in full color, on a big screen and with booming stereophonic sound. No doubt we will continue doing so until that day, which Herr Handel (who turned out a few military pieces in his time) celebrates in his Messiah, when, in one final fanfare, "we shall all be changed in a moment, in the twinkling of an eye, at the last trumpet." I'm sure that someone will be there to record it.

Aram Bakshian, Jr., holds the honorary rank of colonel on the staff of the Governor of Louisiana. A speechwriter by profession, he has also published many articles on military subjects.
WHERE does musical comedy go from here? The torch that George Gershwin apparently passed on to Leonard Bernstein has been sputtering uncertainly for some years as Mr. Bernstein has applied his energies to other aspects of his genius. New tunes by Richard Rodgers are scarcely as hummable as the old ones. Hair seemed for a time to herald new things, but thus far has failed to inspire a sturdy successor. The standard two-act anatomy of the creature has been suffering from hardening of the musical arteries long enough that a face-lift revival of No, No, Nanette, with three non-palling acts but a non-political innocence that makes Oklahoma sound like a Marxist tract in comparison, is our greatest success. Vincent Youmans is gone, however, so the man of the hour is Stephen Sondheim, who wrote the music and lyrics for the two latest Harold Prince productions on Broadway, Company and Follies. Is Sondheim the last of the old line, or a pioneer, a harbinger of things to come?

Sondheim, who wears a Janus face in Follies, looking backward with what Clive Barnes called a series of "pseudo-oldie numbers" and forward with fresh, smart lyrics and tunes that shun the old sure-fire approaches, walked off this year with two of the six Tony's won by Company. I met him shortly after that, fresh from watching him murmuring laconically on television that "It's even nicer to win two." He was pacing up and down the living room of his apartment in mid-town Manhattan, looking young (which he is) and earnest (which he can't always be) as he wound up the dictation of several letters to a diligent secretary. Maps, antique parchesi boards, one-armed bandits, and other puzzle-and-game motifs made up the principal decorations of the softly lamplit room where we talked. I asked him right away if he would be good enough to tell me where musical comedy was headed. Was the "art form" of the Broadway musical all washed up or just wriggling out of its cocoon to spread glistening new wings? Were we at
the end of the line, or just waiting for a connecting vehicle with transfers in our hands?

"If you want to talk about the end of the line," Mr. Sondheim replied, running a hand through his thick black hair and scowling thoughtfully, "you have to go back to Gypsy. That was the last word in the so-called integrated musical. It went as far as you could with the straightforward unfolding of the old scene-song-scene-song form."

Since Mr. Sondheim himself wrote the lyrics for Gypsy, and I wouldn't have minded going back there at all, I inquired just how he thought the situation had changed since Gypsy opened in 1959.

"When I wrote the words and music for the songs of A Funny Thing Happened on the Way to the Forum and Anyone Can Whistle and then for Company," he explained, "the emphasis began to be on looser, richer, freer forms. In Company the songs are really outside the scenes rather than part of them. You can't guess so well in advance when the dialogue is building to a music cue. The songs themselves are freer, less conventional. Conventional musicals are still around, but there are no surprises in them for us now."

To Sondheim, the difference between the sort of musical he's been working on since he wrote the lyrics for Bernstein's West Side Story and the old tried-and-true Rodgers and Hammerstein treatment is also a matter of sentiment versus sentimentality.

"They took stories that appealed to them," he said, "generally sentimental stories, and the very sentimentality of the content dictated the form they chose. But Company, for example, is not sentimental. It needed a form to suit its cooler, drier attitude. That form began early when Boris Aronson started making sketches for his big, impersonal Manhattan apartment-complex set, and continued right through to the styles of the acting and the singing—all in keeping with George Furth's book, where the emphasis was on story line in terms of character. A leaner, less cluttered approach in every way."

A few days later Follies was to be found, by some of its critics, to be lacking in heart. Mr. Sondheim, for his efforts in trying to get away from musical-comedy clichés in his songs, was to be called down by Mr. Barnes for being "a Hart in search of a Rodgers, or even a Boito in search of a Verdi," but this hadn't happened yet on that early spring evening. Most critics, including the New York Drama Critics' Circle, which voted Company the best musical of 1970, had found the songs in that show delightful, while this magazine's reviewers (including myself) voted the original-cast album among the year's best records.

But Follies was never intended to be as fashion-able as Company. For its stars it called Yvonne de Carlo, Alexis Smith, Dorothy Collins, and Ethel Bar- rymore Colt out of retirement, even reaching all the way back for Fifi D'Orsay of silent-screen fame. Yet the past, in every aspect of the story and the songs, is regarded in Follies through the prism of the present, with a singularly tearless kind of nostalgia. And Company itself was a fairly dry-eyed look at marriage. When Elaine Stritch sings Here's to the Ladies Who Lunch, it's a toast in vitriol, not in one of Schrafft's fruit shrubs. It is not likely that Mr. Sondheim will be luring us back to the soft-headed sentiments of I Do, I Do.

Where, then, will he lead us? I was reminded by all those gameboards on his walls that the fellow is fond of puzzles; he made up many of those tantalizing crosswords published in New York magazine. His lyrics for West Side Story shunned the facile, mindless kind of rhymes to sparkle like Yip Harburg at his best, but with a more diamond-hard and intricate anagrammatic texture. He is still young (forty-one), and it wasn't so long ago that he was writing scripts for television series like Topper, after winning the Hutchinson Prize for Musical Composition when he was attending Williams College. Perhaps a bit of the strength, intricacy, and hardness of his songs stems from an early stint in the study of composition with Milton Babbitt, who has written some of the most difficult serious music of our time. Sondheim may bring Fifi D'Orsay back to us, but he is never going to persuade us back down the path of Tiptoe Through the Tulips. Still, he never loses touch with his essentially middle-class, middle-brow audience. Company comes out roundly in favor of marriage, even for its carefree bachelor hero Bobby; there's a whole song about it. And Follies, whatever else it may be, is nostalgic.

Stephen Sondheim assured me that he hasn't the slightest doubt that musical comedy will survive in one form or another. "Audiences liked Company," he said, "because it challenged them. There is no end in sight as long as there are new challenges. There's always content lying around, and there will always be forms invented by inventive people to suit the content. In Follies and in Company, the concentration was on character as opposed to the old preocupation with production values. New talents will come along with other ideas and other approaches and bring a different kind of life to the musical."

I didn't ask Stephen Sondheim where the new talent is going to come from, or whether it has shown any signs of life recently, to his knowledge; he was a man with an opening imminent, and he had quite enough already on his mind.
IT IS A curious fact of contemporary musical life that the period of Early Romanticism, one we think we know quite well, is really very little known and less well understood. Beethoven and Schubert, for example, are not really typical of the period which began with the late form of classicism we call “Empire” and subsequently evolved into that comfortable early Romanticism the Germans call Biedermeier. The words “Empire” (the French pronunciation) and “Biedermeier,” of course, are clues, for the great centers of these styles were, respectively, Paris and Vienna. The French capital has entirely lost the tradition, but it has never entirely died out in the Austrian metropolis. It is entirely fitting, therefore, that mementos of this neglected period should come from the city which has always appreciated elegant frivolity and sentimentality—even, sometimes, at the expense of genius—and there is a pair at hand: four works gorgeously performed by the Vienna Octet and superbly recorded by London Records.

Konradin Kreutzer (b. 1780) is not the Kreutzer for whom Beethoven wrote a sonata (that was Rodolphe), but another, best remembered (in Austria) for his opera Das Nachtlager von Granada. Kreutzer was primarily a stage composer and conductor, and his center of operations was, predictably, Vienna. He also wrote a good amount of instrumental music as well, of which the sample that represents him here, a very
grand Grand Septet, handsome, diverting, and full of charm and dignity, is probably typical. Were it of Parisian birth, I would unquestionably label it “Empire,” but being of more eastern origin (Kreutzer was never west of Switzerland and died in Riga), it certainly qualifies as “Biedermeier.”

Ludwig—or, as he called himself and should therefore be known, Louis—Spohr had a contemporaneous career. Born four years later than Kreutzer, he was almost equally successful as a violinist and as a composer (“Bach interwoven with Spohr and Beethoven at classical Monday pops” was, I believe, one of Gilbert’s punishments to fit the crime in The Mikado). He was a highly talented and quite original composer who lacked only what they used to call “the fire of genius.” Spohr, who influenced early Romanticism much more than the difficult Beethoven or the obscure Schubert, remained the very model of bourgeois Biedermeier Romanticism, and the style is perfectly represented by the gentle and graceful sentiments displayed in his quintet for piano and winds on the second of these discs.

Franz Berwald was born in 1796 in Stockholm and studied in Berlin and Vienna. His rather Schubertian music has recently had a revival, and it is easy to see why. The Stor (Swedish for “grand”) Septet has immense appeal. Its faults are easy to find, but much of it is irresistible—the first movement would melt ice. I’m sure

---

JULY 1971
there are mountain brooks that are more (or less) perfect than other mountain brooks, but who would think of criticizing a mountain brook in the first place?

Dvořák and his music belong to another generation, but a work such as his G Major Quintet is in fact more closely related to early Romanticism than to the Lisztian/Wagnerian nineteenth century. Its richness is due in large part to the use of the double bass — here perfectly played and reproduced.

Except for what seems to be a bit of inner-groove distortion toward the end of the Spohr, these are superbly produced discs in every dimension. Interestingly enough, there appear to be eleven “members” of the Vienna Octet.

Eric Salzman


THE CONCERTGEBOUW AND THE MAHLER NINTH
Bernard Haitink directs an illuminating performance of the complex masterpiece for Philips

BEGINNING with the pre-War Vienna concert performance under Bruno Walter (who premiered the music after the composer’s death), the Mahler Ninth Symphony has not lacked outstanding recorded performances. Among the presently available readings of this vast and complex masterpiece, Bruno Walter’s 1962 version and subsequent ones by Georg Solti and Leonard Bernstein stand out in their own distinctive ways.

To this select company must now be added Philips’ new recording of the symphony by the Amsterdam Concertgebouw Orchestra under conductor Bernard Haitink. It is, for me, the disc realization that comes closest to revealing the totality of Mahler’s vision in this work, thanks not only to a most probing search of the music’s expressive and textural-architectural inner substance, but by virtue of superior recorded sound.

From the foreboding opening measures, through the eerie and grotesque middle movements, and on to the ethereal close, Haitink’s handling of tempo, dynamics, solo-ensemble balances, and complex inner textures is utterly just. The dramatic impact is not neglected, but neither is the sense of the arching musical structure, most notably in the huge opening movement. The clarity of the multilinear goings-on in the savage Rondo-burleske third movement is both a wonder and a joy to hear. When he is in top form, as he is here, Haitink has an uncanny flair for bringing into a mutually reinforcing balance all the expressive and formal elements of the most complex scores, be they by Mahler, Bruckner, or Holst.

A large part of the credit for this splendid musical achievement belongs to the Philips engineering staff, which has used stereophonic recording technology in a most tasteful and creative fashion—not to exagger-
ate or heighten effects, but rather to set into precise acoustic proportion every element of Mahler's score. The solo and "chamber ensemble" episodes of the music are thus revealed in perfect clarity throughout the entire course of the performance. This recording is a signal service both to the art of Mahler and to the art of recording.

David Hall

MAHLER: Symphony No. 9, in D Major. Amsterdam Concertgebouw Orchestra, Bernard Haitink cond. PHILIPS 6700 021 two discs $11.96.

ENTERTAINMENT

JACK JONES SINGS MICHEL LEGRAND

His latest for RCA is another step forward in the development of a refreshing talent

Jack Jones is one of those rare singers who continues to develop the potentialities of his talent and his musical raw materials in such a way that each successive album is surprisingly fresher and more polished than the last. He seems to learn from his music instead of trying to compete with it, and he is aided in this, of course, by a cool swinging head for lyrics, flawless taste in what he chooses to sing, and a beautiful voice that can embrace a variety of moods, styles, and tempos with equal skill.

For his latest RCA album, the Jones Boy went to Paris and persuaded the overworked Michel Legrand to join him in a studio for the first complete vocal album in English of the composer's songs. The result is full of beauty and delightful surprises, a little something for everybody. The orchestrations may cradle Jones in a hammock of understated strings at one moment, only to bounce him aloft on a starlift upbeat the next. Sweet Gingerbread Man should get to rock enthusiasts with its tongue-in-cheek beat; others may prefer a murky but mellifluous blues called Blue, Green, Grey and Gone. The pensive and deftly modulated One at a Time should take its place among the better ballads of the day, and I have never heard Jack Jones in better voice than on a fabulous song called The Years of My Youth. This is the only song in the collection without lyrics by Alan and

BERNARD HAITINK: An uncanny flair for orchestral balance
Marilyn Bergman; it is both provocative and successful, and it proves that Legrand can work with equal grace with various talents. This is not to take anything away from the Bergmans—they are very well-served in the other selections, especially Pieces of Dreams. But curiously enough, some of their best work (such as Summer Me Winter Me) is not included. And I do not understand the presence here of the banal and now tiresomely overexposed Windmills of Your Mind from The Thomas Crown Affair, when His Eyes Her Eyes is such a vastly superior song. But these are just quibbles.

One Day, a powerful anti-war song first introduced two years ago at Lincoln Center when Leonard Bernstein conducted for Barbra Streisand, is by itself reason enough to buy this superb addition to that special section on any discriminating collector’s shelf reserved for Jack Jones. It is a mature and moving album that makes most of the “musical” noise I've been hearing lately sound downright stupid in comparison with it.

Rex Reed

JACK JONES: Sings Michel Legrand. Jack Jones (vocals); orchestra, Michel Legrand arr. and cond. The Years of My Youth; Sweet Gingerbread Man; Pieces of Dreams; One Day; What Are You Doing the Rest of Your Life; Blue, Green, Grey and Gone; I Will Say Goodbye; Windmills of Your Mind; One at a Time; Nobody Knows. RCA LSP 4480 $5.98, ® P8S 1678 $6.95.

*MILES DAVIS’ MOVIE MUSIC

His background score for Jack Johnson suggests the opening up of a new creative phase

Miles Davis was black and militant long before the words became fashionable clichés and political footfalls on both sides of the color line. He has always been fiercely proud of his blackness, and his artistic militancy often includes verbally chastising his live audiences when he discovers that their attention is wandering even slightly.

For years he has been generally acknowledged as the best jazz trumpeter in the business, but of late his albums have reflected a steady drift beyond or even out of jazz into a highly personal sound world. It is much too sophisticated to be called any sort of jazz-rock fusion—although it has elements of both. It is free-form, yet there are nonetheless apparent the bones of some kind of musical structure. It involves the use of expert studio effects as a sound-adjunct to the music itself, but it doesn’t substitute mere electronics for musicality.

Davis composed the score for Jack Johnson, the film based on the life of the famous boxer, and in it he has pulled off two coups: he has written a piece of music that stands as music without the need for any plot information or image, and he has created sounds that no one else can or does make. The latter may be owing in part to the superb production job that Teo Macero has achieved (and for which Davis thanks him in the liner notes), but most of it lies in the unique spontaneous impulses that seem always to have distinguished Davis’ performances on recordings. One cannot always agree with the appropriateness of some of these impulses (Davis’ preference, for instance, for overly ripe orchestral sound has always seemed to me to cheapen his best work), but at least they seem to fit him and no one else.

Davis is still playing the best trumpet in the world, as you can verify for yourself in this recording. But, more important, he has moved into something that really is his own musical thing; in retrospect, his classic albums such as “Sketches of Spain” now seem to be only warm-ups for an imminent major creative phase in an always arresting career.

Peter Reilly

MILES DAVIS: Jack Johnson. Original-soundtrack recording. Miles Davis (trumpet); orchestra. Right Off and Yesternow. COLUMBIA 5 30455 $5.98, ® SR 30455 $6.98, ® SA 30455 $6.98, ® ST 30455 $6.98.
This used to be just a dream.

For the first time, we can accurately “tune” the frequency response of your complete component system including your listening room to a single flat acoustic response at your ears. Right in your home by a factory trained Acousta-Voicette dealer. Guaranteed to ±2.0 dB. With the revolutionary new 729A Altec Acousta-Voicette Stereo Equalizer. You’ll hear the original acoustic environment of the recording hall—and not the acoustics of your listening room.

With the Altec Acousta-Voicette, it’s now a reality.

The new Altec Acousta-Voicette is built to work in your home. It costs $799.00. And note it’s not just another broadband equalizer. Instead, the Altec Acousta-Voicette utilizes 24 fully-adjustable, critical bandwidth rejection filters per channel—48 in all. It lets us put all sound frequencies into perfect balance.

Altec Acousta-Voicette.
For the perfect balance of sound.

Mail this coupon for a free brochure.

To: Altec Acousta-Voicette, Altec Lansing,
1515 South Manchester Avenue, Anaheim, California 92803

Please send me your new brochure describing the Altec Acousta-Voicette Stereo Equalizer and how an Altec Acousta-Voicette dealer can accurately “tune” my component system—including my listening room—to a ±2.0 dB final acoustic response.

Name ________________________________

Address ______________________________

City ___________________________ State ________ Zip ____________

A QUALITY COMPANY OF LTV CORP ALTEC. INC

JULY 1971

79
The voice of America...
and Italy... Spain...
Germany... England.

And Angel.

A historic trio.
Accompanist Gerald Moore, who has heard all the best voices in the past 40 years, says flatly, "Janet Baker and Dietrich Fischer-Dieskau are the two greatest singers today." In 1969, the two gave an evening of duets at Queen Elizabeth Hall, accompanied by Daniel Barenboim. When they repeated their triumph at Carnegie Hall this January, Harold C. Schonberg (N.Y. Times) wrote, "It was an evening of vocal delight. The voices of Miss Baker and Mr. Fischer-Dieskau clung lovingly together, matching each other in nuance, flow and understanding. Mr. Barenboim was the most lucid and refined of accompanists." We recorded their London concert "live" for an album that captures the magic that can happen between great artists and a good audience.

A young Pinza.
Time paid Ruggero Raimondi the ultimate compliment, "His clean, coppery voice already suggests the younger Ezio Pinza." The Gramophone singled out his performance in our Verdi Requiem, then repeated their praise for his role in our La Forza del Destino: "His splendid bass makes a grave, steady, satisfying Father Guardian." Only 29, he is a talent to watch. And hear.

Treasures from Spain.
"Victoria de los Angeles seems to save her freshest, sweetest, most feminine and subtly nuanced tonal coloring for the Spanish repertory," Peter G. Davis concluded in High Fidelity. The joy of these gifts is most apparent in "Spanish Folk Songs." It may well be her most glorious album, distilling her love for her heritage in a voice of almost instrumental purity.

In search of perfection.
The late George Szell and Elisabeth Schwarzkopf shared many qualities, but none to a greater degree than their passion for perfection. In 1966, they recorded an album of Richard Strauss songs. This new release, with the London Symphony, adds seven more Strauss songs, plus four Mozart concert arias. It is incomparable, a tribute to two consummate artists and the rewards of unrelenting discipline.

Barcelona has sent us another splendid soprano, Montserrat Caballé. In a long-awaited first complete recording, she sings Imogene in Il Pirata. This, her distinguished operatic debut on Angel, is praised by High Fidelity as being "her best performance to date in a complete operatic role on disc. (She) sounds perfectly gorgeous ... a thoroughly accomplished piece of work."
RECORDING OF SPECIAL MERIT

BACH, J.S.: Italian Concerto, in F Major (BWV 971); “Little” Prelude No. 1, in C Major (BWV 924); 12 “Little” Preludes (Prelude No. 10, in G Minor, preceded and followed by Stölzel Menuets); Adagio in G Major (BWV 968); English Suite No. 2, in A Minor (BWV 807); Prelude and Fugue in E Major, in C Major (BWV 870); Fantasia, in A Minor (BWV 922); Igor Kipnis (harpsichord and clavichord). COLUMBIA M 30231 $5.98.

Performance: Excellent
Recording: Excellent

For most of us, the clavichord has about as much reality in our imaginations as the unicorn. We’re willing (maybe) to believe it once existed. But, if so, what was it really like? With this recording of music for both the harpsichord and the clavichord, Igor Kipnis satisfies us of the instrument’s reality, though the exigencies of recording technique almost certainly exaggerate its size a bit.

Kipnis is a splendidly forthright and meaty interpreter of these works. The music’s pulse moves forward with beautiful regularity, and ornaments fit into the rhythmic scheme without either a sense of hurried crowding or of upsetting the music’s metrical movement. Changes of registration are achieved with the clavichord as he is with the larger instrument, and the woodwind sections, such as “Domine Deus omnipotens” or “Qui sedes ad dextram Patris,” that lack either of them contributed by the vocal soloists, are often taken at a lugubriously slow pace can, of course, benefit from a tempo that is faster than usual (the opening Kyrie, for instance), and conductor Karl Münchinger achieves an excellent sense of forward motion in much of this performance. But there are too many moments, such as “Et incarnatus est,” that lack either the intimacy or the pastoral quality that is called for. Tempos are pushed, as in “Et incarnatus est,” and the trumpet flourishes in the Credo are excessively loud. There are, to be sure, some very fine things to be heard here, many of them contributed by the vocal soloists, especially in the Sanctus and the Benedictus. But much of the pacing and the dynamics is unvarying—the dynamic level never descends an unvarying—the dynamic level never descends.

Most recordings of Bach’s B Minor Mass take up two discs. This one, which is confined to two, is, as you might expect, rather speedy in tempo, and that is what is primarily wrong with the performance. Here the music never seems to have time to breathe. Sections that are often taken at a lugubriously slow pace can, of course, benefit from a tempo that is faster than usual (the opening Kyrie, for instance), and conductor Karl Münchinger achieves an excellent sense of forward motion in much of this performance. But there are too many moments, such as “Domine Deus omnipotens” or “Qui sedes ad dextram Patris,” that lack either the intimacy or the pastoral quality that is called for. Tempos are pushed, as in “Et incarnatus est,” and the trumpet flourishes in the Credo are excessively loud. There are, to be sure, some very fine things to be heard here, many of them contributed by the vocal soloists, especially in the Sanctus and the Benedictus. But much of the pacing and the dynamics is unvarying—the dynamic level never descends to the really soft. The performance is not helped by the acoustic, which is muddy and tends to obliterate the conductor’s articulation; the choral sound, consequently, is almost Mendelssohnian, and, in such a movement as “Et resurrexit,” it is extremely difficult to make out what the all-important tenor and alto lines are doing. All in all, after Münchinger’s other recent Bach performances—his splendid Magnificat, for instance—this one is disappointing.

For me, Karl Richter’s performance on DG Archive 2710 001 remains the preferred version of the B Minor Mass.

I.K.

RECORDING OF SPECIAL MERIT

BACH, J.S.: Passacaglia, in C Minor (BWV 582); Prelude and Fugue, in E Minor (“Wedge,” BWV 548); Toccatas and Fugues, in D Minor (BWV 565) and F Major (BWV 540); Heinz Wunderlich (Arp Schnitger Organ of St. Jacobi Church, Hamburg). NONESUCH H 71252 $2.98.

Performance: Splendid
Recording: Superior

Here are four big, big organ works of Bach, played reliably, even quite excitingly, by one of Germany’s finer performers. Heinz Wunderlich, who recorded the Passacaglia and the familiar D Minor Toccata and Fugue once before in a pre-stereo version (on a Cantate import), has most of the attributes of the German organ school: good technique, an excellent sense of architecture, a solidity in his approach that on occasion may seem a bit Teutonically square, an understanding of phrasing and articulation, and a curiously old-fashioned academic concept of ornamentation (most trills start on the main note). Helmut Walcha, still to my mind the greatest exponent of the Bach organ works, plays very much the same way, although in some of these same pieces (the toccatas, for instance) his sense of drama and rhetoric is superior to Wunderlich’s. By most standards, however, Wunderlich plays these four works very well indeed. What makes the disc so outstanding, though, is the choice of instrument, an Arp Schnitger tracker that is surely one of the most impressive organs ever captured on records. The instrument, which has some pipes dating back to 1512, was constructed by Schnitger between 1689 and 1693. It was restored about ten years ago, has over sixty stops, and sounds simply fabulous. Never have I heard the F Major Toccata sound out with the full-bodied splendor that it does here. The recording, fortunately, is excellent; for Bach played on a large Baroque instrument one could find few discs to compare with the impact of this one.

I.K.

BEETHOVEN: Quartet No. 2, in G Major, Op. 18, No. 2; Quartet No. 16, in F Major.
There was a time when mentioning the name of the Flohrayza String Quartet to a chamber-music devotee rang all the big gun of bells that mention of the Budapest Quartet did later. O tempora, o mores. Here is the Flohrayza again, on a pretty well-reconstructed mono recording taken from original 78's recorded in 1926. They still sound like fine, interesting musicians, though their stylistic mannerisms, their techniques and general spirit place them in a period far, far distant from our own. This is a record for scholars, perhaps, and chamber music lovers who sometimes wish they hadn't thrown away all their 78's. It's a delight, but there are no messages for the future.

L.T.

BERWALD: Stor Septet (see Best of the Month, page 75)


Performance: Okay

Recording: Not sensational

John Lill is the co-winner, with the Russian pianist Vladimir Kaineyev, of the 1970 Tchaikovsky competition in Moscow. His origins and previous reputation are unknown to me. DG has never had very good luck with pianists, and I am not enormously impressed by their new keyboard artist. His playing is heavy-handed. I don't expect Brahms to sound like Scarlatti, but the German composer has his own style and swing, and not much of it is captured here. I also find the piano sound murky and, in my usual crotchet way with most pianists and piano recordings, I'm afraid I'm going to have to write this one off. Lill's competition in Moscow couldn't have been very stiff.

E.S.


Performance: Ripely romantic

Recording: Favors piano

The two massive "symphonies with piano obbligato," designated by Brahms as his D Minor and B-flat Major piano concertos, are issued by Philips as an integral package in new and imposing readings by Claudio Arrau, with Bernard Haitink and the Amsterdam Concertgebouw handling the all-important orchestral assemblage. If any of the many artistic collaborators can make an eloquent case for the romantic emphasis (retards and all) in the performance of these works, Arrau and Haitink are the ones; for the romantic emphasis in this instance is tempered by an over-riding sense of the architectural grandeur that underlies the expressive content of the whole. "Expansive" might be the most accurate description for the Arrau-Haitink readings. Whether one prefers this style to the tauter and more dynamic way of Serkin (whether with Ormandy or Stelel) or the swiftly moving delicacies of Richter in the B-flat (with Leinsdorf—not Maazel!) is indeed a matter of personal taste; but let it be said again that the Arrau-Haitink statement is a powerful one indeed.

Recorded balance between piano and orchestra is an important factor, too, in one's choice of a preferred reading on discs. The Philips engineers have favored the soloist, though not obtrusively so. However, one is aware here of a "dual perspective" between piano and orchestra that is not the case with either of the Richter recordings of the B-flat, in which piano and orchestra do seem to be functioning on the same sonic plane. Again, personal taste enters the picture here. Within its chosen frame of sonic reference, the Philips recording as such is very fine.

Arrau fans will very rightly consider this package a "must"—a most eloquent and authoritative statement of interpretive conviction.

D.H.

BRITTEN: The Prodigal Son, Op. 81. Peter Pears (tenor), Tempter and Abbot; John Shirley-Quirk (baritone), Father; Bryan Drake (basso)

Everything that artists and record company could do to make this release a success has been done. Under the composer's own supervision, Britten's "Third Parable for Church Performance" is recreated here with a vividness, dedication, and technical assurance that could not be higher.

The atmosphere of St. Bartholomew's Church (near Aldeburgh, Suffolk), for which the work was written and in which it was recorded, has been masterfully caught by London's engineers, who have surmounted difficulties of a marvelous degree. The following, however, will make it across. Besides the minor failings (there are many), there is a major and unforgivable one: a lack of an attempt to bring into relief the basic thematic material and special qualities of this work. While it is not to say that the boy's repentance would be manly attractive, but it is shallowly portrayed; and the boy's repentance would be more impressive if it did not appear to be motivated solely by his running out of cash.

E.S.

BRUCKNER: Symphony No. 1, in C Minor. Vienna Philharmonic Orchestra, Claudio Abbado cond. LONDON CS 6706 $5.98.

Performance: So-so

Recording: Good

Buckner's First is a remarkable symphony, among the composer's most original and coherent works (see the extraordinary slow movement). But this performance doesn't get it across. Besides the minor failings (there are many), there is a major and unforgivable one: a lack of an attempt to bring into relief the basic thematic material and special qualities of this work. While it is not to say that the boy's repentance would be manly attractive, but it is shallowly portrayed; and the boy's repentance would be more impressive if it did not appear to be motivated solely by his running out of cash.

E.S.

RECORDED OF SPECIAL MERIT

COUPERIN, F.: L'Apotheose de Lully; Le Tombeau of The Prodigal Son published yet. But the recorded performance unaided gives a perfectly coherent impression of a work that is serious, dignified, imaginative, interminably beautiful, and yet, I think, ultimately unsatisfying.

Like Curlew River and The Burning Fiery Furnace, the two previous parables, the Prodigal Son is an attempt by Britten and his librettist William Plomer to devise a new kind of dramatic presentation that fuses stylized theatrical interest, strong religious feeling of a Christian turn, and operatic procedures developed over those already used by the composer in secular chamber operas like The MASONS and The Turn of the Screw.

The whole is presented in the framework of a plainsong hymn, "Jam lucis orto sidere," which is chanted as processional and recessional at the beginning and end. In between, the story of the Prodigal Son, taken from Luke X, is played out in dramatized terms, and in a formalized conversational idiom that occasionally crystallizes in set pieces representing the farmer working hard but peacefully in the fields or, again, the conventional city delights to which the boy is lured by the Tempter. Almost all of the musical material is derived, ingeniously and with some poetic feeling, from the plainsong. But in spite of Britten's skill, the prevalence of spiky arsos in the vocal parts and of short declaratory or ritualistic figures in the instruments becomes tiresome long before the end.

More important—since otherwise the static quality might be accepted as a value in itself—is the thinness of the musical characterization. The externals of the story unfold clearly enough, but as it approached its conclusion I did not feel that I had been made to perceive the workings of the human heart, whether in compassion or in despair, that lie behind the narrative. Plomer's text is a shade too pat in its delineation of motive, and Britten has not succeeded in transcending the limitations thus imposed. Furthermore, I find the parable, at least in this form, a rather uninspiring one. The father's forgiveness of his wastrel son is humanly attractive, but it is shallowly portrayed; and the boy's repentance would be more impressive if it did not appear to be motivated solely by his running out of cash.

Buckner's human document, then, The Prodigal Son has its shortcomings. As a recorded presentation, however, of a stimulating, if unsuccessful, artistic endeavor, this release could scarcely be overpraised. Those who enjoyed the two earlier parables will like this one too, though I personally find nothing in it that quite matches the poignancy of the lamenting flutes in Curlew River.

B.J.

BRUCKNER: Symphony No. 1, in C Minor. Vienna Philharmonic Orchestra, Claudio Abbado cond. LONDON CS 6706 $5.98.

Performance: So-so

Recording: Good

Buckner's First is a remarkable symphony, among the composer's most original and coherent works (see the extraordinary slow movement). But this performance doesn't get it across. Besides the minor failings (there are many), there is a major and unforgivable one: a lack of an attempt to bring into relief the basic thematic material and special qualities of this work. While it is not to say that the boy's repentance would be manly attractive, but it is shallowly portrayed; and the boy's repentance would be more impressive if it did not appear to be motivated solely by his running out of cash.

E.S.

RECORDING OF SPECIAL MERIT

COUPERIN, F.: L'Apotheose de Lully; Le
For the first time in his career, Vladimir Horowitz has recorded a Rachmaninoff solo album. The first side features his new recording of the Sonata in B-Flat Minor. It's some of Horowitz' most fiery and dynamic playing.

And on the other side are additional new recordings of five more Rachmaninoff pieces: Prelude in G-Sharp Minor, Moment Musical in B Minor, and three Etudes-Tableaux.

Horowitz' performances of these pieces possess all the lyricism and poetry of the composer. And of the artist himself.

Both sides have been recorded in concert at Carnegie Hall, Philadelphia's Academy of Music, and Constitution Hall in Washington, D.C.

But what's really special is what the music reflects: his close friendship with Sergei Rachmaninoff.

Also available on tape.
One of the most interesting musical developments in Europe during the late seventeenth and early eighteenth centuries was a cross-breeding of styles, particularly between the French and the Italians. Each nation was intensely nationalistic, but through such composers as François Couperin, who realized how French music could benefit from Italian influences, a fusion was soon effected. That fusion can be heard in two works by Couperin: The Apotheosis of Corelli (1724) and The Apotheosis of Lully (1725). These chamber works are allegorical representations of Corelli's ascent to Parnassus, and the similar journey by Lully, who, when he arrives, is welcomed by the illustrious Italian violinist-composer, particularly in the second piece, one has the opportunity to compare the different compositional styles, the more flowing Italian contrasted with more rhythmically angular and subtle French manner. Toward the end of the latter work, Lully and Corelli even "play" violin duets. The music is hyper-refined, but is superb of its type and well worth knowing.

This is far from easy music to play. The best of previous versions has been a recording of both Apotheoses by Sylvia Marlowe's ensemble on Decca 710159, and there has achieved a very fine small-orchestra version by Raymond Leppard of the Lully Apotheosis on L'Osseau-Lyre S 300. The present Archive disc gives us the chamber setting, played on original instruments in the best of possible ways. It is an excellent set of performances in every way; the playing is expert stylistically, and very alert and vital, with widely ranging dynamics; it is also sensitive to the programmatic structure, and most impressively virtuosic. The disc is filled out with a violin sonata by Leclair, one that, because of the tone of its first movement, is subtitled "Le Tombeau." It too is played very well indeed; Edward Melkus is much more aggressive than Ulrich Greihing, who recorded the work previously on Helidor HS 25018 (now evidently deleted), but his playing is also undeniably exciting. The sonorous reproduction is first-rate.

**RECORDING OF SPECIAL MERIT**

**DELIS: Concerto for Piano, in C Minor, DEBUSSY; Fantaisie for Piano and Orchestra.** Jean-Rodolphe Kars (piano); London Symphony Orchestra, Alexander Gibson cond. LONDON CS 6657 $5.98.

**Performance:** Very fine **Recording:** Excellent

An imaginatively conceived coupling, this—two not inconsiderable works by Delius and Debussy, dating from years when both were still struggling to achieve their highly distinctive musical languages. The Delius is, for this listener, a lower-profile companion to the Grieg and MacDowell piano concertos, less virtuosic but in some ways more poetic. The opening pages and the whole of the slow movement echo unmistakably the composer's memories of the Negro songs heard during his years at the Solano Grove (Florida) plantation in the early 1880's. The 1906 version used here (as in previous recordings) represents a streamlining of the three-movement 1897 original. Sir Thomas Beecham, in his biography of Delius, talks of an extended 5/4 section in the finale of the original which is omitted in the revision, and this explains, perhaps, why the concluding section of the Concerto (it is in one movement) as it stands seems more in the nature of an epilogue than a true finale.

The Debussy Fantaisie, withdrawn by the composer at the time of its rehearsals for a first performance under Vincent D'Indy, is by no means insignificant stuff. It is ample in scale, exuberant in expression, and rich in substance, in much the same way as the Primestone orchestral suite of a few years before. The handling of the musical substance in the Fantaisie seems to me to be more sure, fluent, and economical than in Pristempte. Though the mature Debussy letters (to be recorded by CRI was part of the prize), is sonically one of the most elegant discs I have heard in some time. And the music is, to say the least, first-rate, and recorded on tape in an extraordinarily fine amalgam. As a rule, I'm rather turned off by singers who are left by composers to deal only with disjointed syllables, glottal stops, sexy moans, screams, andiggles. Even here, in a piece which truly convinces me, I find this use of the voice a bit self-consciously chic and arch. On the other hand, Animus II aims to evoke "the celebration of a sybaritic ritual," and I'm all for that. Perhaps this is a sufficient pretext for using such a vocal technique. Certainly, the beautifully sculptured, flowing organization of this piece does add up to the "ritual" the composer had in mind. And anyone who wants to hear his stereo equipment giving out genuinely stereophonic sounds will be in a frame of mind to enjoy this interesting work.

The piece can be said to reflect Nicolas Roussakis' Night Speech. Here is a work which, without using any electronically synthesized materials whatsoever, manages to sound like an electronic piece, or at least a piece of musique concrète. It is neither. The forty-two singers of the Macalester College Choralists playing an interesting assortment of percussion instruments, and forty-two mouth-organs, one blown by each of the singers at the work's climax, are the sonic materials Roussakis has used. It is a "sound piece" par excellence, anachronistic and concrete. It grows and struts and fugues, and I think it's very good.

L.T.

**DVORAK: Quintet in G Major, Op. 77 (see Best of the Month, page 75)**

**RECORDING OF SPECIAL MERIT**

**FOSS: Concerto for Oboe and Orchestra.** Bert Gassman (oboe); Crystal Chamber Orchestra, Akira Endo cond. STEVENS; Concerto for Clarinet and String Orchestra; Mitchell Laurie (clarinet); Crystal Chamber Orchestra, Akira Endo cond. CRYSTAL S 851 $5.98.

**Performance:** Excellent **Recording:** Excellent

Lukas Foss' Concerto for Oboe and Orchestra is a bright-eyed, neo-classic work written in 1948, when the composer was only twenty-six years old. He was, indeed, a startlingly gifted young fellow even then. There's a lovely rhythmic sense in this music, and delightful plays of melody. Bach, Hindemith, Stravinsky, and Copland may be in the background, particularly in the first movement. But there is also a sense of 'Foss' youthful self-hood. The playing of Bert Gassman, soloist for this recording, is an absolute miracle. His tone is unforgettable subtle and attractive; his rhythmic poise and phrase-shaping are a constant joy.

Halsey Stevens' Concerto for Clarinet and String Orchestra is also a neo-classic work, (Continued on page 86)
AR COMPONENTS ARE USED BY EXECUTIVES AT ANGEL RECORDS TO HEAR FIRST PRESSINGS OF NEW RELEASES.

A new Angel record is the sum of the creative efforts of many individuals. Orchestra, soloists, and engineers must be scheduled many months in advance and are frequently brought together over great distances to make the recording. Engineering at the recording session and during the transfer from tape to disc requires great care and precision. Each stage of the process, and the way in which it is carried out, influences the musical values in the recording finally released.

As responsible executives at one of the world's largest recording organizations, the men who conduct Angel's operations can afford any equipment except that which distorts or falsifies the quality and content of a recording. The executive conference room at Angel Records is equipped with AR high fidelity components.

Suggested retail prices of the AR components shown: AR amplifier, $250; AR turntable, $87; AR-3a speaker systems, $225-$250, depending on cabinet finish.

Acoustic Research, Inc.
24 Thorndike Street, Cambridge, Massachusetts 02141, Dept. SR-7

Please send a free copy of your illustrated catalog, as well as specifications of AR components, to

Name ____________________________
Address ____________________________
the Menuetto movement of the "Miracle" Symphony, Ormandy and Münchinger (to name only two) do use the octave underlining of the oboe melody in the trio. However, rather than employing a solo trumpet ("that makes Haydn's delicate waltz sound like a barroom band"), Ormandy uses another oboe, which sounds very pretty indeed. Münchinger, if my ears don't betray me, uses a trumpet, but so discreetly that the results, though a trifle bucolic, could hardly be called tasteless. In fact, after hearing the versions with the octave doubling, one rather misses it in the present recording: the tune just sounds repetitions.

I wouldn't want anyone to get the impression that I'm against authenticity or that, as a composer myself, I don't decry anybody's tampering with the notes a composer has written. But I think Mr. Landon's fine observations will have limited aural relevance to most admirers of these symphonies. George Szell's performances differ from others in only one respect: they are incomparably magnificent.

L.T.
IF YOU RECOGNIZE THE LOOKS, YOU KNOW THE QUALITY

Sansui 5000 X AM/FM Multiplex Receiver

If you immediately think, "That's a Sansui", when you spot the distinctive styling, you know enough to assume it will also have sumptuous sound, velvety operating feel, fabulous specifications and deluxe features to match. And you're absolutely right.

Continuous power is 60 watts per channel at 8 ohms, by our own tough standard (or 200 watts of IHF music power). At a total harmonic distortion below 0.5%, not "under 1%." With IHF power bandwidth of 15 to 30,000 hz, not 20 to 20,000. FM sensitivity is 1.8 µv IHF—and the sensitivity curve bends sharply beyond that point for real pickup power.

It's got a microphone input with its own control for blending in live voice and instrumental performance with disc, broadcast, tape or any other input. Tape in/out facilities for up to four decks. Exclusive stereo-only FM mode. Linear-tuning FM dial. Separable pre- and power amplifiers. Foolproof pushbutton speaker connectors . . . to mention just a few features. Of course it's a Sansui . . . $399.95

Sansui ELECTRONICS CORP.
Woodside, New York 11377 • Gardenia, California 90274
SANSUI ELECTRIC CO., LTD., Tokyo, Japan • Sansui Audio Europe S. A., Antwerp, Belgium
CIRCLE NO. 40 ON READER SERVICE CARD
KREUTZER: Grand Septet, in B-flat Major
(see Best of the Month, page 75)

LECLAIR: Sonata for Violin and Continuo
(see COUPERIN)

MAHLER: Symphony No. 7, in E Minor
(“Song of the Night”), Concertgebouw Orches-
tra, Bernard Haitink cond. PHILIPS
6700034 two discs $11.96.

Performance: One of the best

Recording: Excellent

I am going to hedge in the course of this re-
view. An interim report on recordings of Mah-
ler’s problematical Seventh Symphony is more
in order than a categorial judgment, since Sol-
ti’s overwhelmingly brilliant if uneven per-
formance should be available in a few months,
and Kubelik’s version is also expected. More
than any other Mahler symphony, the Seventh
(especially in its outer movements) seems to
me to change character with every new inter-
pretation. This may be a reflection on Mahler,
or on his conductors, or on me. But in any
case, it necessitates the gathering of as much
evidence as possible, from all sources, before a
decisive statement is made about any of the
individual versions.

What I am reasonably sure of, at this point,
is that Haitink’s performance is the only rival
to Bernstein’s for the rubric of “best available
recording.” Abravanel’s reading is workman-
like but unremarkable, Klemperer’s so lab-
bored that I am unable to get through to the
end of it.

Bernstein’s version is a great one. Haitink’s,
aided by a newer and marginally better record-
ing and by the absence of one or two little inac-
curacies that were regrettably allowed to slip
through Columbia’s editing, is quite different,
and in its own way equally powerful. Haitink,
whose orchestra plays magnificently through-
out, is at his best in the most difficult parts of
the work. His much more static reading of the
slow introduction to the first movement gives a
new, stimulating, and effective view of the con-
trast between slow and fast sections, lending
the movement a more sharply profiled struc-
ture than Bernstein’s more homogeneous treat-
ment. In the finale, Haitink’s handling of the
tricky tempo relations is absolutely master-
ly. I am inclined to think that his performance
of this curiously ambivalent music is the best
yet recorded.

In the central Schattenhaft scherzo, strangely
enough, Haitink’s tempo changes are not al-
ways convincing. Bernstein is marvelous here,
as he is in the first Nachtmusik. But though
Haitink misses some of the mystery Bernstein
draws from this magical movement, his brisker
reading has a healthy charm of its own, and in
his second Nachtmusik, which is likewise fast-
er, innumerable touches of seemingly sponta-
neous grace beguile the ear.

That is where we stand at present. So
ti’s “live” performances were supremely effective
in the outer movements, but his conception of
the three inner ones—the greatest music in the
symphony—will need humanizing if his re-
cording is to supersede these two splendid
ones. And Kubelik, for the moment, is an un-
known factor.

B.J.

MAHLER: Symphony No. 9, in D Major
(see Best of the Month, page 76)

RECORDING OF SPECIAL MERIT

MAYR: Medea in Corinto, Marisa Galvany
(soprano), Medea; Joan Paterneau (soprano),
Creusa; Molly Stark (soprano), Ismene; Allen
Cathcart (tenor), Jason; Robert White (tenor),
Aegus; Thomas Palmer (baritone), Creonte;
Clarion Concerts Chorus and Orchestra, New-
ell Jenkins cond. VANGUARD CARDINAL VCS
10087/8/9 three discs $11.94.

Performance: Good

Recording: Very good

Giovanni Simone Mayr (1763-1845) was a Ba-
varian who made Italy his home. After rigor-
ous and diversified musical training, he settled
in Bergamo and became a highly esteemed
composer and teacher (of Donizetti, among
others). Musical historians have never slighted
his achievements, but there was virtually no
way to hear Mayr’s music until the present. His
many operas passed into oblivion after the
composer’s lifetime—even Medea in Corinto,
regarded as his masterpiece. In 1963, the bi-
tenary year of the composer’s birth, Medea
received a thorough restudy in his native Ba-
varia, resulting in a growing appreciation, and
several successful performances, of this long-
lost work.

Medea in Corinto is quite a remarkable op-
era. Felice Romani’s effective libretto is con-
structed along conventional lines, but the dra-
matic vitality that emerges from the new edi-
tion (by Heinrich Bauer and Newell Jenkins)
is vital and dully bewitching. Mayr receives an
unusually extraordinary gifted com-
poser for the stage. Though there is little in
the score that instantaneously imprints the mem-
ory, the melodic invention is distinguished
even enough to make the opera’s disappearance
from the repertoire puzzling from that stand-
point alone. As for Mayr’s orchestral writing, it
is of a kind that recalls the mastery of Carl
Maria von Weber. Surely no Italian opera com-
poser of that era commanded orchestral re-
sources with the imagination and virtuosities
Mayr displays in Medea in Corinto. The scene
in act two when Medea prepares the poisoned
robe for Creusa has an almost Verdian atmo-
spheric power. And later, when Jason receives
the news of Creusa’s tragic death, the influence
on a similar scene involving the grieving Ed-
gardo in Donizetti’s Lucrezia di Lammermoor
becomes quite evident.

The Vanguard recording followed a staged
performance of the opera in New York, at Al-
bert Hall on December 2, 1969. In the
itle role, which, like Cherubini’s Medea, is
full of great music-dramatic challenges, Mari-
sa Galvany reveals an intense, electrifying pre-
sence that seizes the attention and makes certain
technical flaws in her singing seem relatively
unimportant. Joan Paterneau sings the role of
the ill-fated Creusa poignantly, and Robert White
shows a nice feeling for the bel canto
line as Ego (Aegus). Allen Cathcart is an ef-
factive Jason despite a certain carelessness with
the text. Conductor Jenkins is in thorough
command throughout, eliciting exceptionally
fine choral and orchestral performances and as-
suring a very effective realization of an opera
decidedly worth hearing and owning.

G.J.

MOZART: Violin Concerto No. 4, in D Ma-
jor (K. 218). MENDELSSOHN: Violin Con-
certo in E Minor, Op. 64. Jascha Heifetz (vio-
lin); Royal Philharmonic Orchestra, Sir Thom-
mas Beecham cond. SERAPHIM @ 60162 $2.98.

Performance: Suave

Recording: Good medium-fi

It was a good idea to combine these Heifetz
(Continued on page 90)
When Realistic® builds a 269.95 receiver you get power and features you don’t expect.
When Realistic improves a 269.95 receiver you get more power, more features at the same low price!

new Features of the REALISTIC STA-120B
1. Direct-coupled power amplifier!
2. Integrated circuit IF stages!
3. Plug-in circuit boards!
4. Super-fast circuit protection!

The Realistic STA-120 had more power than anything at its price and a list of features the competition didn’t have at all. The new STA-120B is still the same years-ahead receiver but with refinements where they really count, not in wasteful styling changes. Sharper FM selectivity. Wider power bandwidth. Easier serviceability. Transformerless output circuitry now with 150-watt power at 8 ohms. Plus all the “old” goodies. Hi and Lo filters, a switch that selects only stereocasts when tuning FM, wideband AM—and a “certain sound” that’s the result of 50 years of audio experience at Allied Radio Shack. “Improved” is more than just a word with us—hear what we mean at our store near you!

Over 950 Stores Nationwide
See the Yellow Pages

2725 W. 7th St. Fort Worth, Texas 76107
Mail Order Costs No More—We’ll Pay the Shipping!
Push me the Realistic STA-120B AM/Stereo FM Receiver
I enclose □ check □ money order for 269.95
Name (print)
Street
Apt # ___________ Box ___________ Route ___________
City ___________ State ___________ Zip ___________
Beecham collaborations, particularly since, originally released two years apart, they were not paired in their initial long-play incarnations. Of the two, the Mozart concerto, recorded in 1947, comes off better. It is a characteristically Heifetz performance, light and mercurial, gleaming with his own brand of tonal ultra-polish, and enlivened by three of his own cadenzas that are short and teeming with difficulties only Heifetz could make sound easy. The technical goals are brisk but not uncomfortably so, and they are logically interrelated, even if this makes for a rather unsentimental Andante Cantabile in the middle movement. The stiff tone combined with a viscerally puzzling performance is present in the Mendelssohn concerto, but here the violinist propels this sunny, amiable music at a hard-driven, at times almost furious, pace. I doubt very much that this was Beecham's way, but he provides efficient accompaniments in both concerts.

Whatever the reservations, Jascha Heifetz is such a sovereign master of his instrument that his interpretations deserve to be retained in the catalog, and this low-price reissue fills the need admirably.

G.J.

ORFF: Catulli Carmina. Arleen Auger (soprano), Wieslaw Ochmann (tenor); Berlin German Opera Chorus and Orchestra, Eugen Jochum cond. Deutsche Grammophon 2530 074 $6.98.

Performance: Highly theatrical
Recording: A bit over-bright

Catulli Carmina is the earliest conceived of the Trionfi trilogy, of which it is now the central part, the end panels being Carmina Brevia (1935-36) and Trionfo di Afrodite (1950-51); in 1939 Orff devised an a cappella choral setting that included the greater part of the Catullus-Lesbia poems in the later work, completed in 1943. The final form calls for tenor and soprano as the protagonists Catullus and Lesbia, plus chorus and elaborate percussion ensemble with pianos. The poems that speak of Catullus' ill-fated love and bitter disillusionment are prefaced by an elaborately chorale Praeludium, in which, to a highly erotic Latin text of Orff's own authorship, the young men and women confront the mocking old men who despise the "now" philosophy of love and sex espoused by the young. Catullus and Lesbia act out the passion, irony, and tragedy of love and sex, as set forth in the Roman's celebrated poems. At each bitter turning point the old men interject their mockery; even so, at the end the young men and women reiterate their chant of unashamed passion.

This new reading of the Catulli Carmina by Eugen Jochum underscores the work's theatrical qualities. The superb soloists Arleen Auger and Wieslaw Ochmann are not merely incidental to a brilliant concert presentation, as seems to be the case with Judith Blegen and Richard Kness in the Eugene Ormandy recording that I had on hand for comparison; they bring the figures of Catullus and Lesbia alive in all their passion and bitterness. On the other hand, Ormandy's Rutgers University Chorus displays more rhythmic precision than the Berlin Opera group (but he omits some of the old women's exclamations in the late pages of the score), and the recorded sound, vocal and instrumental, is more full-bodied and recorded at higher volume level. DGG's sound has more mid-range emphasis than is usual, which results in an apparent thinning out of bass and a greater presence of the high percussion.

A choice between these two recordings depends in essence on whether one prefers Catulli Carmina as a virtuoso concert piece (Ormandy) or as an intensely personal literary-theatrical experience (Jochum).

D.H.


Performance: Inadequate
Recording: Good enough

The Polish-born pianist Felicia Blumenthal surely deserves thanks for her yeoman work in getting onto records a whole string of otherwise forgotten but far from unworthy items of the piano-and-orchestra repertoire: Kublau and Clementi, Kozeluch and Paniello, and a dozen other concertos to have turned up on such labels as Turnabout, Orion, and Auditorium, played by the lady. But in a freewheeling super-virtuoso Romantic piece like the Paderewski Piano Concerto, a keyboard whiz kid of the Earl Wild stripe is needed to put it across. For all her effort, Mme. Blumenthal is not able to make the music take fire; and the rambling Anton Rubinstein opus is a further drag on the whole affair. The orchestral support is adequate and no more—again, a Philadelphia Orchestra is needed to provide the real glitter and pizzazz this kind of music demands. Will Wild, Raymond Lewenthal, or Ivan Davis please come to the rescue and give us a real knockout version of Paderewski's fine old chestnut?

D.H.

RECORDING OF SPECIAL MERIT

PENDERECKI: The Devils of Loudun. Tatiana Troyanos (mezzo-soprano), Jeanne; Cvetka Ahlin (mezzo-soprano), Claire; Ursula Boese (contralto), Louise; Helga Thieme (soprano), Gabriele; Ingeborg Krüger (soprano), Phili- lippe; Elisabeth Stein (contralto), Nino; Andrazj Fiolski (baritone), Grandier; Bernard Ladysz (bass), Father Barre; Hans Sotin (bass), Father Rangier; Horst Wilhelm (tenor), Father Mignon; Ernst Wiemann (bass), Father Ambrozin; Joseph Hess (speaker), d'Armagnac; Rolf Menner (speaker), Jeanne; Kurt Marcher (tenor), Adam; Heinrich Blankenburg (baritone), Mannoury; others; Hamburg State Opera Chorus and Orchestra, Marek Janowski cond. PHILIPS 6700 042 two discs $11.96.

Performance: Superb
Recording: Excellent

Krzysztof Penderecki's first opera is one among a growing group of twentieth-century theatrical works that make demonic possession a major spring of the dramatic action. In Prokofiev's The Angel of Fire, the focus was on the infatuated heroine, and the theme of religious hysteria was thus of prime importance. The balance of interest in The Devils of Loudun (whose libretto Penderecki drew from sixteenth-century history, through the intermedi-ate sources of Aldous Huxley's The Devils of Loudon and John Whiting's dramatization of that work as The Devils) lies elsewhere.

The principal figure here is the priest Urbain Grandier. The mad passion entertained for him by the prioress Jeanne is of importance only insofar as it furnishes his enemy Richelieu with a tool for his destruction: the true theme of the opera is political persecution.

On the other hand, the theatrical potential of raving nuns, along with all the paraphernalia of (Continued on page 92)

STERO REVIEW
A working musician talks about the VM professionals.

Bonnie Herman is back up talent on Ramsey Lewis' new album, just finished the new album "Green Light Sunday" for RCA and the music track for a new Hollywood film. She's featured on radio and TV commercials for a dozen major advertisers.

"Is it running? I can't hear it."

The click! whir! clatter! of changer mechanism and falling records is now a thing of the past. Our new automatic turntable is triggered by a silent photo electric cell. Also, a muting switch silences the signal during changes. But most remarkable of all, ours doesn't drop records when it changes them. It lowers them, slowly and gently, onto a motionless turntable.

"Master tape quality. That's okay!"

Granted, she was listening through the receiver and speakers in our Professional Series. Still, turntable distortion would have been all the more evident. And there is none, none you can hear.

That's because our tone arm has counterbalancing, anti-skate system and accommodates all the ultra-sensitive new cartridges and tracks with the lightest of them. But it also has something more. A critical extra length which makes tracking error indiscernible.

"That note would have given you away."

It was a long sustained tone that lets every imperfection in the turntable come through. But there was no Wow, no Flutter, no Rumble. Pitch was perfect. One reason is the precision 24 pole synchronous motor we chose especially to power the turntable. Another is the second synchronous motor only for the changer. Each is completely isolated, the only link with the shock mounted turntable is the soft, flexible drive belt. How else can you get near-silent specs like ours?

If the Professionals can please musicians, recording studio engineers, and sound technicians, people who make a living making great sound, we're confident it can make you very happy, too. If you would like all the facts and figures, write: Professional Series, Dept. 74, P.O. Box 1247, Benton Harbor, Michigan 49022.

Made in Benton Harbor, Michigan, by VM CORPORATION

The VM Professional 1585: Two synchronous motors—24 pole for turntable, one for changer mechanism. Belt driven, completely isolated, low mass, dynamically balanced turntable. Gentle lowering spindle. Automatic record size sensor system. Photo cell cycle-change sensor eliminates side pressure and trip noise. Piston-damped 2-way cue control. 9 1/2" tone arm (from pivot to stylus); the longest on any automatic turntable. Piano-key control center isolated from turntable and pick-up arm. Quick-change, plug-in housing accepts any standard magnetic cartridge. Rumble: .52 db (CBS weighting). $165.*

Model 1555: same as model 1585, but also includes Shure magnetic cartridge and attractive walnut base with dust cover. $220.*

*Manufacturer's suggested retail.

JULY 1971
ghastly exorcism and torture scenes, has so far
taken hold of Penderecki's imagination that the
real subject—Grandier's inner and outer
conflict—is thrust into the background. The
sensational, exploitation of religious mania in its
goreiest aspects tends to overshadow the human drama that lies at
the heart of the work, and I judge this to be a
serious flaw in the way Penderecki has realized
his original concept.

Musically, too, though Penderecki has suc-
cceeded very well in differentiating between
the central group of characters and the
grotesques by whom they are surrounded, the
differentiation does not go beyond this
simple two-level stage. The more subtle distinctions
among the principals themselves remain, at this
stage, beyond his powers. Most obviously,
Jeanne and Grandier, who ought surely to be
musically—as they are dramatically—opposed,
speak precisely the same tortured chromatic
language.

But it is hardly surprising if an operatic task
fulfilled by scarcely half a dozen masters in
the history of the art should have eluded Pen-
dercki at the first attempt. In its highly colored
way, fascinating and repellent at the same
time, The Devils of Loudun is a powerful piece. It
made an arresting impression in its American
premiere at Santa Fe in 1969, and much of that
impression is intact in this recording, derived
from the world-premiere production mounted
by the Hamburg State Opera two months earlier.
One or two moments of important
differentiation are obscured, and some of the eerie choral
writing fails to register, but apart from that the
impact of Penderecki's idiom—a cogent develop-
dment of the repertoire of wailing, scurrying
sounds we know from the St. Luke Passion—is
brilliantly conveyed, and the thirty-year-old conductor, Marek Janowski, is to be congratulated
on his vivid projection of the work.

Tatiana Troyanos is nothing less than blood-
curdling in her portrayal of Jeanne, and An-
drzejj Holski's Grandier is equally masterly,
though in the early scenes he is accorded a
somewhat distant recorded balance that con-
spires to accentuate the dramatic lop-sidedness I
have alluded to. There are no weak links in the
large cast, and the clarity with which Pendere-
cki's cruelly disjointed melodic lines are ne-
gotiated deserves the highest praise.

The set is accompanied by a complete libret-
to with translation and useful notes. The only thing
that baffles me is that, according to the
score (published by Schott and distributed
here by Belwin Mills, who, with admirable
professionalism, supplied a copy of it along
with the review records), there is a cut of some
dozen pages just before the end of the opera
after Grandier's final words. In every other
way, this complex production has been carried
through with great success.

Recording: Excellent

Schubert: String Quintet in C Major,
Op. 163 (D. 956). Sándor Végvár and Sándor Zöldy (violin); Georges Janzer (viola); Pablo Casals and Paul Szabo (cellos). TURNABOUT 7167 $2.98.

Performance: Historic

Recording: Adequate

The Casals Festival in Prades, France, is a part
of history by now, and this disc, stemming
from a "live" performance at that Festival, is a
historical document of the first importance. It
should give delight both to fans of Casals and
of chamber music in general. Since it is an un-
recorded edition, there are many of the little
touches that differentiate a "live" performance
from one designed specifically for recording.
However, as in all "live" performances, there are also the spontaneous interactions be-
tween players that lie at the very core of chamber-
music playing as a high art. The Adagio
movement, for example, contains some of the
most exquisite and touchingly expressive playing
one could ever hope to hear.

The sound does not come up to present-day
standards, and the two cellos are especially
affected by the less than ideal recording cir-
cumstances—they're a bit tight and tubby. But
who cares? This performance is a cultural hear-
lord for the large family of music lovers.

Recording: Excellent

42. Songs: Widmung, Op. 25, No. 1; Mi-
51, No. 2; Schöne Wiege meiner Leiden, Op.
51, No. 5; Er ist's, Op. 79, No. 24; Heiss
mich nicht reden, Op. 98a, No. 5; Lust der
Sturmacht, Op. 35, No. 1. Leontyne Price
(soprano); David Garvey (piano). RCA LSC
3169 $5.98.

Performance: Very good

Recording: Very good

Leontyne Price has come a long way as a song
interpreter since her disc-recital debut more
than ten years ago (LSC 2279). The Frauen-
liebe und Leben cycle lies very well for her
range, and her delivery of these exceedingly
feminine songs has dramatic conviction with-
out intrusive operatic mannerisms. Her enun-
ciation is also excellent, and the meticulously
executed turns in "Er, der Herrlichkeit von Al-
ten" from Frauenliebe und Leben testifies
to her conscientious musicianship.

There are some rarely heard songs on side
two, not all representing Schumann at the
peak of inspiration. But Volksliedchen is a gem of
Mozartian delicacy, and Lust der Sturmacht is
an evocation of nature that stands with the
composer's best. It also calls for singing of vir-
tuoso caliber, and, again, Miss Price is not
found wanting. The piano of David Garvey is
a major asset, and the recorded sound and bal-
ances are ideal.

Recording: Excellent

(Continued on page 94)
NEW DYNACO QUADAPTOR®

Only $19.95 KIT
$29.95 factory-assembled

AND

TWO MORE SPEAKERS
CREASES

FOUR-DIMENSIONAL

DYNAQUAD® STEREO

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

The Quadaptor® is not a synthesizer. Rather it reveals depth and concert-hall sound already on many of your present stereo recordings but not enjoyed due to the limitations of the conventional two-speaker stereo system. The manner in which the new two back speakers are connected unmask this hitherto hidden information to fully utilize everything that has been included on your recordings all along. Not only will the Quadaptor® give you four-dimensional stereo from your present recordings, but you can enjoy the same Dynaquad® stereo from your present FM stereo tuner too.

Best results are realized when the back eight ohm speakers have as constant an impedance as possible. The Dynaco A-25 ($79.95 each) speakers were designed specifically to provide constant impedance. The Stereophile Magazine calls them "probably the best buy in high fidelity today."

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

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

JULY 1971

Performance: Good to brilliant
Recording: Good to splendid

By adding Georg Solti's 1968 disc of the "Rhenish" and Fourth Symphonies to the more recent recordings of the other works listed above, London has come forth with quite a comprehensive package of Schumann's orchestral works. The symphonies, for me, are head and shoulders above the others in quality—the Julius Caesar Overture, one of Schumann's last symphonic works, and the Overture, Scherzo, and Finale, which don't excite me, even in Solti's brilliant performance.

Solti's way with the symphonies is, as might be expected, one that stresses the elements of fervid passion and dynamic rhythmic pulse. The oddly manic aspects of the C Major Symphony, the ceaseless forging ahead of the first movement, for example, assume an aspect close to stridency. The "Spring" Symphony comes forth here with enormous spirit and brilliance, though I must say that Leonard Bernstein's wonderfully expansive and terrifically exciting reading remains the one I prefer. The "Rhenish" and the D Minor disappoint here, mostly because of their sonics, which differ considerably from the other discs in the set. Did the London engineers have an off day? Or perhaps the length of the sides (nearly 33 minutes for the "Rhenish" Symphony, 29'20" for the D Minor) accounts for the falling off of orchestral presence and vital string and brass sound. The volume level is perceptibly down on this disc from that of the other four sides.

As for the complete Schumann-symphony sets, I would wait for a reissue of the Szell-Cleveland Orchestra set, or, should that not happen, go for Bernstein in the "Spring" Symphony and Kubelik for the balance.

D.H.


Performance: Very good
Recording: Excellent

No major composer of any century has written as much trash as Dmitri Shostakovich, and I cannot think of another artist whose work contains such great distance between its heights and its depths. The Tenth Symphony, in fact, turns all the way away from one of those peaks—a beautifully written and moving first movement—and never really picks itself up again. The second movement is pure Shostakovich thud and blunder. The third, a slow, frowzy waltz, dispels its moments of mystery with outbursts of Khachaturian-like exotica. The introduction to the last movement contains some of Shostakovich's meditative and contemplative musical thought, but it is cut short by an "up" finale that goes from hilarity to frenzy—not once but twice (why is it necessary to trace the same ground?). Even so, the last movement has a certain liveliness and stomp to recommend it. The high point is the opening slow movement, long enough to be a complete symphony in itself and beautifully played by the Philadelphia Orchestra. This is an excellent performance and recording, obviously made a while back, before the orchestra's move to RCA.

E.S.


Performance: Energetic
Recording: Somewhat coarse

As a Sibelius devotee, my enthusiasm is pretty much confined to those works that postdate the Second Symphony, and the kind of coupling represented by this disc throws me into a real snit! Tackling a first recording of one of the most mystical and delicately scored of the Finnish composer's vocal-orchestral works almost as an after-thought onto a rabble-rousing performance of the heavily scored blood-and-thunder First Symphony is just about mayhem. This Phyllis Curtin-Leonard Bernstein recording is not once but twice (why is it necessary to retrace the same ground?) Even so, the last "up" finale that goes from hilarity to frenzy—outbursts of Khachaturian-like exotica. The inner movements, however, are short waves, and each of the performers is listening—one to short-waves radio and reacting. The resultant sounds, along with some of the short waves themselves, and electronic modifications and interactions thereof—the controlled mixture of these elements—is what we actually hear. Here are two different realizations of this scheme recorded "live" in Germany almost a year apart—one rather sparse and fragmentary, the other more continuous, more concrete, more nervous and more involving, a far more complete excerpt from the Great Universal Everything.

This is, of course, all "way past criticism. That it is music of a kind and a musical experience (in the case of the second performance, even of great impact), I have no doubt, and the theoretical ideal behind it—tuning in the audible universe through technology and then interpreting it, transforming it, humanizing it—is highly sympathetic. Indeed it is essentially my own often-stated position on life and art and such. But the basic question is—as always—how much of this is actually expressed by the musical experience? Truthfully I am not sure; not that much, I suspect, but this is one case in which I would be curious to know the reactions of more "objective" listeners.

In any case, these are outstanding realizations and recordings; as usual, DG earns our gratitude.

E.S.

RECORDING OF SPECIAL MERIT


Performance: Best of the breed
Recording: Excellent

By this time so many recordings of the first Nutcracker Suite appear in the Schwann catalog that there probably aren't enough nuts in all of Brazil to keep them cracking for very long. There are days when just the passing (Continued on page 96)
Sony presents three distinguished professional quality stereo tape decks for the serious hobbyist. Each of these Sony decks has been value-engineered to offer the greatest possible performance capability for the money. Your Sony/SuperSCOPE dealer will be glad to help you decide which instrument best suits your personal recording needs.

**SONY.**

**SUPERSCOPE.**

You never heard it so good.

HEIFETZ ON TV ON DISC

By George Jellinek

However far NBC's recent television spectacular fell short of presenting a well-rounded portrait of Jascha Heifetz, the man, it confirmed without a doubt that today, at age seventy, he is still a sovereign and unique master of his instrument. And beyond revealing that not very surprising fact, it also illustrated his total concentration, the phenomenal dexterity of his bow arm, and his superhuman control in a vivid close-up no concert experience could equal. But to say that such a viewing experience is "instructive" is to dwell in the realm of wishful thinking. Violinists who attempt to apply the Heifetz solutions to their own arms, to the lightning speed with which Heifetz attacked the widely spaced chords in the Chaconne is another indelible television memory. In short, Heifetz can make the Chaconne sound, if not easy, at least eminently playable. His is, of course, not the Chaconne sound, if not easy, at least eminently playable. The use of smiling? You have to grin to don't I smile?" Heifetz asks himself, and immediately provides an answer: 'What's the use of smiling? You have to grin to make any impression at all. A mere smile cannot be seen beyond the first two rows..." I think he has a point. He should leave the smiles to those who are better at managing the soprano tessitura with security and evenness of timbre. Grace Bumbry has a vibrant temperament and an innate theatricality that lifts much of what she does above the routine. So, despite tonal unsteadiness, the La Gioconda, Andrea Chénier, and Cavalleria Rusticana arias, with their manageable tessitura, are acceptably rendered. (She has already recorded Eboli's scene in Don Carlo for London, and considerably better.) Miss Bumbry has an admirable range, but bravely lunging at high B-flats and B-naturals is not the same as managing the soprano tessitura with security and evenness of timbre. And, unfortunately, excessive vibrato and uncertain intonation add to her vocal shortcomings. The unsuitable orchestral accompaniments are no help: Casta Diva (minus its cabaretta) sounds rather like a sight-reading session for all concerned.


Performance: Disappointing

Recording: Routine

Had this recording been available for review in time for this magazine’s February 1971 issue dealing with the ‘classical crisis,’ I would have cited it as a sample of one of the causes of that crisis: ill-planned and unnecessary releases. Here we have a distinguished mezzo-soprano featured in soprano arias from Italian operas—and recorded in Germany. Surely a recital of this kind is likely not to satisfy anyone.

Grace Bumbry has a vibrant temperament and an innate theatricality that lifts much of what she does above the routine. So, despite tonal unsteadiness, the La Gioconda, Andrea Chénier, and Cavalleria Rusticana arias, with their manageable tessitura, are acceptably rendered. (She has already recorded Eboli’s scene in Don Carlo for London, and considerably better.) Miss Bumbry has an admirable range, but bravely lunging at high B-flats and B-naturals is not the same as managing the soprano tessitura with security and evenness of timbre. And, unfortunately, excessive vibrato and uncertain intonation add to her vocal shortcomings. The unsuitable orchestral accompaniments are no help: Casta Diva (minus its cabaretta) sounds rather like a sight-reading session for all concerned.


RECORDING OF SPECIAL MERIT

VICTORIA DE LOS ANGELES: Thirteen Spanish Folk Songs (collected and harmo-
organized by Federico García Lorca). Ten Sephardic Songs (arr. Valls); Falla: Two Songs. Victoria de los Angeles (soprano); Miguel Zanetti (piano); Jean-Claude Gérard (flute); Oscar Ghiglia (guitar); Annie Challan (harp); Trio à Cordes Français. ANGEL S 36716 $5.98.

Performance: Ideal
Recording: Excellent

Victoria de los Angeles ought to be declared a Spanish national treasure. Spain is lucky to claim her and we are certainly lucky to be able to deepen our knowledge and understanding of Spanish musical culture through her dedicated explorations.

The thirteen folk songs collected and harmonized by the versatile Garcia Lorca are brief, melodious pieces in different moods, frequently set in characteristic and captivating dance rhythms. They are not difficult to sing, encompassing as they do a rather limited range, but it takes a Victoria de los Angeles to sing them with such an abundance of charm, lightness, humor, and expressivity.

The Sephardic songs are quite fascinating, considering that organized Jewish life in Spain was supposed to have ceased in 1492. These songs are purported to be "in the Spanish Jewish dialect," but this description is misleading, for only a scholar could differentiate the language heard here from pure Castilian. The melismatic turns in the music, on the other hand, clearly point to Hebraic origins. The ten songs add up to about that many minutes of total enchantment.

As for the two Falla songs, *Psyche*, set to a French text, is Impressionistic, and *Soneto a Córdoba* is a passionate ode. The latter allows a fleeting glimpse of the soprano's current limitations above the staff and suggests why she limits herself nowadays to a safer tessitura. No matter: she still casts an irresistible spell as a vocalist, and in repertoire of this kind she is incomparable. The varied accompaniments are all ideally suited to their purposes: simple, tasteful, and atmospheric.

MIRACORD 50H
CIRCLE NO. 52 ON READER SERVICE CARD

IMPERIAL BAND CONCERT (Nineteenth Century Waltzes and Marches): March of the Preobrazhensk Regiment; March of the Kuban River Scouts Regiment; Totleben; Slav Woman's Farewell; March of the Pechora Regiment; Battle at Liaoyang; Triumph of the Victor; On the Hills of Manchuria; Danube Waves; The Birch; Woodland Tale; Recollection; The Orchid. U.S.S.R. Defense Ministry Band, Nikolai Nazarov and Nikolai Sergeyev cond. MELODIYA/ANGEL SR 40161 $5.98.

Performance: Unflagging and endless
Recording: Excellent

If your idea of sheer heaven is a concert of nineteenth-century band music, have I got a record for you! It contains all the marches and waltzes you could ask for, it goes on forever, and it's played with dogged expertise by the U.S.S.R. Defense Ministry Band. Where did it all start, this preoccupation with sounding brasses and clashing cymbals? With war, of course. Russia was always at war with somebody, and band music was a vital part of it. As the liner notes accompanying this disc point out, "horns, trumpets and tambourines sent soldiers off to fight, and heightened the din of battle." Later, elaborate peacetime bands were developed. Peter the Great, in the 1700's, brought musicians to Russia from all over Europe. At the coronation of Catherine II in 1763, dozens of serfs lined up playing
New music from czechoslovakia.

Sommer: Vocal Symphony. Nancy Williams (mezzo-soprano); Ambrosian Singers; Peter Ustinov (narrator); London Symphony Orchestra, Igor Buketoff cond. Klusák: First Invention, for seventeen players. Fiser: Fifteen Prints after Dürer’s “Apocalypse.” London Symphony Orchestra, Igor Buketoff cond. RCA LSC 3181 $5.98.

Performance: Excellent
Recording: Excellent

American conductor Igor Buketoff has recorded here three Czechoslovakian works, composed in the past decade, which bespeak three stylistic points of view. Vladimir Sommer (b. 1921) writes in an ample, expressive orchestral manner which has its own direct impact, though it does not try to hide the influence of Honegger and Prokofiev. The three movements of his symphony are based on texts (sung in English) gleaned from the writings of Kafka, Dostoyevsky, and Pavese. They are consistently tragic in tone and adroitly scored, and carry a considerable amount of eloquence. Jan Klusák (b. 1934) is represented by a twelve-tone work entitled First Invention, for an ensemble of seventeen solo players. Like the other music on this disc, the Invention seems decidedly nonrevolutionary in aim, and strives for expressivity. In this regard, the early portions stay close to normal conventions of the style. Later, more fluent and personal statements evolve.

The Fifteen Prints after Dürer’s “Apocalypse” by Lubo Fiser (b. 1935) brings back the full orchestra, augmented by harpsichord, and deals enthusiastically in instrumental color. From the liner notes it is not entirely clear just how much is aleatory in producing these textures. Almost certainly there is some, and the results are attractive.

All three performances on this record are first-rate. Buketoff controls everything (including the three different styles) with easy assurance, and the London Symphony Orchestra makes a really fine sound. Nancy Williams, the American mezzo-soprano who sings in the Sommer work, has a stunningly opulent voice and deals enthusiastically in instrumental color. From the liner notes it is not entirely clear just how much is aleatory in producing these textures. Almost certainly there is some, and the results are attractive.

All three performances on this record are first-rate. Buketoff controls everything (including the three different styles) with easy assurance, and the London Symphony Orchestra makes a really fine sound. Nancy Williams, the American mezzo-soprano who sings in the Sommer work, has a stunningly opulent voice and deals enthusiastically in instrumental color. From the liner notes it is not entirely clear just how much is aleatory in producing these textures. Almost certainly there is some, and the results are attractive.

All three performances on this record are first-rate. Buketoff controls everything (including the three different styles) with easy assurance, and the London Symphony Orchestra makes a really fine sound. Nancy Williams, the American mezzo-soprano who sings in the Sommer work, has a stunningly opulent voice and deals enthusiastically in instrumental color. From the liner notes it is not entirely clear just how much is aleatory in producing these textures. Almost certainly there is some, and the results are attractive.
HINDEMITH'S DER SCHWANENDREHER

A minstrel joins a merry company and displays what he has brought with him from afar: grave and gay songs, and, to close with, a dance piece. Like a true musician, he expands and embellishes the melodies to the best of his ability and inventiveness, preludizing and rhapsodizing. This medieval picture was the program for the composition." These words by Paul Hindemith preface the score of his "concerto on old folk tunes for viola and small orchestra," Der Schwanendreher, completed in 1935 and first performed in November of that year by Willem Mengelberg and the Amsterdam Concertgebouw Orchestra, with the composer as viola soloist. Like the piece itself, this fanciful tableau is an expression of Hindemith's artistic credo as it had taken shape in the mid-Thirties. Troubled by the increasing isolation of composer, performer, and listener from one another, he saw the ideal musician as a craftsman of a special sort, a composer-performer whose skills—utilitarian like those of any craft—move, exalt, and entertain as the occasion may demand. Der Schwanendreher aims to entertain, and, for me, it succeeds.

Hindemith took the title from the first line of the folk song that is the basis of the final variation movement: "Seid ihr nicht der Schwanendreher?" Commentators do not agree on what "der Schwanendreher" means. Some translate the line as "Aren't you the swan-turner?", taking "der Schwanendreher" in its literal sense to mean the man who turned the spit on which swans were roasted for eating in the Middle Ages. Others say the word is a metaphorical name for a hurdy-gurdy man, perhaps so dubbed because the handle of the hurdy-gurdy resembles the long neck of the swan. This seems the more plausible supposition to me. Hindemith took the title carefully. Why Schwanendreher? I think it is another reference to his view of the artist. The hurdy-gurdy man, like the "minstrel" violist of this work and Hindemith himself, is the artist as craftsman-performer, and his social function can be clearly inferred from the appeal made to him by the words of the song: "Aren't you the organ grinder?/ Aren't you the very same?/ Then turn the handle for me./ So that I can believe it./ If you don't turn the handle for me,/ Then you are no organ grinder./ Turn the handle for me."

Three other fifteenth- and sixteenth-century folk tunes are used in Der Schwanendreher. In the first movement, the song "Zwischen Berg und tiefem Tal" is combined with two contrasting themes in vigorous fashion. The second movement has two distinct parts: a beautiful pastoral duet for viola and harp, and, following a bridge passage in which the song "Nun laube, Lindlein, laube" is intoned gently by the woodwinds, a fugato on the children's song "Der Gutzgauch auf dem Zaune sass." The phrases of "Nun laube" and the viola-harp melody combine to bring the movement to a quiet close. The headlong variations of the third and final movement are interrupted once by an extended lyrical passage, but for the most part they are bustling and bumptious, full of the earthy good cheer that is (some say unfortunately) Hindemith's stock in trade. Harmonically, the spirit of Mathis der Maler (1934) pervades Der Schwanendreher: the effect is fresh, simple, and sweet-sounding. The small orchestra consists of woodwinds, brass, percussion, a harp, cellos, and basses. Because there are no orchestral violins or violas, the solo instrument stands out in high relief.

Two recordings of this work, both on budget labels, are listed in the Schwann catalog: Paul Doktor's with the London Philharmonic led by Edward Downes (Odyssey 32 16 0368), and Raphael Hillyer's with the Japan Philharmonic led by Akeo Watanabe (Nonesuch H 71329). I prefer the latter by a wide margin. It is a brisker, more incisive performance, and Hillyer's tone is richer and his intonation surer than Doktor's.
OUR CLASSICS ARE ALWAYS YOUNG NO MATTER WHAT THEIR AGE.

The conductors and soloists who perform them keep them that way. By giving them interpretations that are alive to the spirit of the day.

So the past has presence. And recent works sound as contemporary as they were meant to.

The result is gratifying: our classical library rarely gets left on the shelf. And you don't get left behind the times.

ON COLUMBIA RECORDS®

Nelson Freire
Chopin: The 24 Preludes

M 30486

Boulez Conducts Berlioz:
SYMPHONIE FANTASTIQUE

M 30587

Mussorgsky Pictures at an Exhibition
Eugene Ormandy
Philadelphia Orchestra

Night on Bald Mountain

M 30574

*Also available on tape

© COLUMBIA / © MARCAS REG. PRINTED IN U.S.A

STEREO REVIEW
ERIC BURDON & WAR: The Black Man's Burdon. Eric Burdon (vocals); instrumental accompaniment. Black on Black in Black; Paint It Black; Laurel & Hardy; and seventeen others. MGM SE 4710-2 two discs $9.96.

Performance: White soul  
Recording: Very good

Well, if anyone cares to give an award for Bad Taste this year, it should go to Eric Burdon and M G M for the cover on this one. (How fascinating that whisk-kid M G M Records president Mike Curb would take a hasty, and ultimately meaningless, cheap shot at drug-oriented music, and still allow this recording—with its patronizing attitude toward black culture—to be released. Oh, well.)

Yet it would be a mistake to disregard too hastily Burdon's obvious affection for the many forms of black popular music. His songs—mostly originals—run the gamut of black styles: the Chambers Brothers, Sly, Sam Cooke, all sorts of jazz and r&B—take your choice. Ironically, Burdon is an effective performer; he has translated his sincere love for the music into something that is so open-handed in its intent that one can almost overlook the paucity of his musical gifts.

Ultimately, however, it comes down to that old, old story of whether you prefer originals or imitations. Burdon confuses the issue somewhat by surrounding himself with powerful black players, but it doesn't rub off. If you dig black music you can't help but turn to Wilson Pickett, James Brown, Curtis Mayfield, etc., and away from pale simulations. That Man Is Burdon. Eric Burdon (vocals); instrumental orchestra. Traction in the Rain; Orleans; Cowboy Movie; Laughing; What Are Their Names; and seventeen others. RCA LSP 4499 $5.98.

Performance: Indulgent  
Recording: Excellent

David Crosby (Crosby, Stills and Nash) qualifies as one of the true grandees of the pop world. And judging by this album, he's beginning to think so, too. Out of nine tracks here, only one, Tamalpais High (at about 3), moved me in the slightest. The rest are so fused over, so airless, so overproduced, and so 'in' (apparently every pop luminary in California is involved in some way or another with the album) that listening to it was like standing in the Green Room of a broken-down rep theater listening to ham actors congratulate each other. Crosby is a very talented, acutely intelligent writer-performer, and how he ever managed to put out an album that sounds like George Jelsel sixty years later is a mystery to me. Skip this one.

MILES DAVIS: Jack Johnson (see Best of the Month, page 78)

JOHN DENVER: Poems, Prayers and Promises. John Denver (vocals and guitar); orchestra. Let It Be; Junk; Gospel Changes; Fire and Rain; The Box: Around and Around; and seven others. RCA LSP 4499 $5.98.

Performance: Good  
Recording: Excellent

Liking Joan Baez as much as I do, I wondered why I'm not awfully enthusiastic about John Denver. He has the same obvious sincerity of purpose, the same gift of phrasing, and the same idealistic aims. And he is a fine songwriter in the new-old troubadour tradition. When I have seen him on television I have been mildly impressed, especially by his material, but listening to him on records I find my attention wandering and a certain amount of impatience creeping over me. Finally I realized why. Unlike Baez, whose voice enchants me even when she wanders around the pitche, Denver's voice grates on me. And by this I mean I find something ventricloquial about it, as if it were being produced by a compartment somewhere within him and projected through his windpipe. Second, Denver's low-key style, effective in the tight close-up of a TV camera, comes across on records as a serious lack of showmanship. Projection is certainly not all, but it is a fair part of any performer's responsibility in extracting the most from his material. In his performance, Junk, one of the better 'ecology' songs, seems just to lie there, like its title. And his version of the Lennon-McCartney Let It Be comes off not so much gentle as vapid.

There is no question that Denver is an important writer or that he deserves the success
SLEEPY JOHN ESTES: Electric Sleep. Sleepy John Estes (vocals and guitar); Sunnyland Slim (piano); Jimmy "Fast Fingers" Dawson (guitar); Odie Payne III (drums); Casey Bell (harmonica and bass); Earl Hooker (bass); Joe Harper (bass). I Ain't Gonna Sell It; Everybody's Got to Change Sometime; Walking Down Beale Street; If the River Was Whiskey; Needmore Has Harmed Many a Man; and five others. DELMAR DS 619 $4.98.

Performance: Rural blues electrified
Recording: Okay

Okay, I know it sounds a little daft to bitch about intonation on a blues record of this sort. But, wow, it's really almost impossible to listen through those wildly quivering out-of-tune chords into the music. Quite literally, I get the feeling that at least three or four players are working with ear muffs on, completely oblivious to what everyone else is playing. I love Sleepy John, especially when he works with players like Hammie Nixon and Jimmie Rachell, but I find the association with Jimmy "Fast Fingers" (and, boy, are they) Dawson a little strange, and not especially interesting. But with that bloody intonation it's hard to tell what is going down. Sorry, fellows, I just don't have the stamina to break through it.

THE 5TH DIMENSION: Love's Lines, Angles and Rhymes. The 5th Dimension (vocals); orchestra; Bob Aicvar vocal arr. Time and Love; Love's Lines, Angles and Rhymes; What Does It Take (To Win Your Love?); Guess Who; Viva Tiraio; Light Stages; The Rainmaker; He's a Runner; The Singer; Every Little Moon Ball? Maybe even a winner, with your old Arthur Murray dance steps to and from an overkill of nostalgia that has been stereotyped human beings. Don't fret. I'm suffering just as certainly, what the 5th Dimension's latest album that you can't apologize for my taste most emotionally bland, of the current groups. The tunes are interesting on first hearing, sometimes strikingly so—but the tracks one recalls are almost always other people's works, in this case Dylan's If You Gotta Go and Jagger/Richard's Wild Horses (with lovely piano work by Leon Russell—a plain obviousinger). The 5th Dimension are such an insanely good-time band that it's almost impossible to dislike them. But it's equally difficult to be very enthusiastic about their music.

RECORDING OF SPECIAL MERIT

GOOSE CREEK SYMPHONY: Welcome to Goose Creek, Goose Creek Symphony (vocals and instrumental). Welcome to Goose Creek; Right Track; Back Here; Saga 'neath the Sycamore; Uncle Pen; and five others. CAPITOL ST 690 $5.98, ® 8XT 690 $6.98.

Performance: Tasty corn
Recording: Good

Corn twice as high as an elephant's eye is the product home-grown by the Goose Creek Symphony, who invite you to join them "in Southern Kentucky beneath the fuzzy-edged sun" for a program of aggressively bucolic Bluegrass music. Since this group doesn't take itself too seriously, "Welcome to Goose Creek" is a pleasant enough sojourn, wedded the sound of barn-dance fiddles to contemporary rhythms in a manner more agreeable than it probably sounds. I particularly liked their song about Uncle Pen, who fiddled tunes until the day he died, when he "hung up his fiddle and he hung up his bow" (because he knew it was time for him to go). I also liked The Corn Won't Grow So Rock 'n' Roll, which calls for "love and understanding" because "men can't live on cornbread alone." The Finale for a Symphony that ends the concert is a paean of quiet praise to freedom, nature, and the simple life. Good, clean, commercial country fun.

P. K.

GRAND FUNK RAILROAD: Live Album. Grand Funk Railroad (vocals and instrumental). Introduction: Are You Ready; Paranoid; In Need: Heartbreaker; Inside Looking Out; Words of Wisdom; Mean Mistreater; and three others. CAPITOL SWBB 633 two discs $5.98, ® L 633 $7.95, ® 8XMB 633 $7.98, ® 4XMB 633 $7.98.

Performance: Ear-shattering
Recording: Very good

It's not so much that Grand Funk is a bad rock group as that they are so bloody dull. Here they are, playing an hour and twenty minutes of music that has been "assassined" to be played in sequence... without interruption (potent word, "assemble"). Well, I tried it—several times—and never discovered what all the hollering was about. But then I felt the same way the last time I saw Grand Funk at Madison Square Garden.

How to evaluate this two record set, then? It's probably not even necessary, since Grand Funk has enough true believers to keep their releases high on the best selling-charts. For those of you who somehow have managed to miss hearing the group, suffice it to say that it is loud (extremely so), musically rudimentary, and endlessly repetitive: an ultimate wateriring-down of the heavy rock elements that began with Cream, passed to Led Zeppelin, and finally wound up on Grand Funk's dismal tracks.

D. H.

THE GRATEFUL DEAD: Vintage Dead. The Grateful Dead (vocals and instrumental). It Hurts Me Too; Dancing in the Street; In the Midnight Hour; It's All Over Now, Baby; Blues: I Know You Rider. SUNFLOWER SUN 5001 $4.98.

Performance: For Dead "heads"
Recording: Good

A "live" performance from the Avalon Ballroom in San Francisco by the Grateful Dead, this disc features a picture of a wine bottle on its jacket. The vintage of the wine is California 1970, but the recording was made in 1966. The mixture of new wine and old rock makes for some accidental irony, however. The Dead are, playing an hour and twenty minutes of "live" music that has been "assemble"ed to create a program of aggressively bucolic Bluegrass music. Since this group doesn't take itself too seriously, "Welcome to Goose Creek" is a pleasant enough sojourn, wedded the sound of barn-dance fiddles to contemporary rhythms (Continued on page 104).
Announcing the NEW STANDARD in Stereo Testing!
Get the All-New Model SR12 STEREO TEST RECORD
The most complete...most sophisticated...most versatile Test Disc available today... For Just $5.98!

Who Needs the New Model SR12?
If you've read this far, you do. Whether you're an avid audiophile who'll settle for nothing but peak performance from his stereo components...a casual listener who'd like more insight into the challenging world of stereo reproduction...or a professional technician who needs precise standards for lab testing...the new MODEL SR12 will be the most important disc in your entire collection.

You'll make these important stereo checks BY EAR... (no test instruments of any kind required)

- Frequency response—a direct warble-tone check of nineteen sections of the frequency spectrum, from 20 to 20,840 Hz, which will pinpoint any frequency response defects in your system.
- Separation—an Ingenious test which indicates whether you have adequate separation for good stereo.
- Cartridge tracking—the most sophisticated tests ever devised for checking the performance of your cartridge, stylus and tone arm.
- Channel balance—two broad-band, random-noise signals which permit you to eliminate any imbalances originating in cartridge, amplifier, speakers or room acoustics.
- Hum and rumble—foolproof tests that help you evaluate the actual audible levels of rumble and hum in your system.
- Flutter—a sensitive "musical" test to check whether your turntable's flutter is low, moderate, or high.

PLUS!
- Cartridge and Speaker Phasing
- Anti-Skating Adjustment
- "Gun Shot Test" for Stereo Spread
- Multi-purpose Musician's "A"
- Equal-Tempered Chromatic Octave
- Guitar-tuning Tones.

AND, for the ultimate in stereo testing, 7 critical TEST EQUIPMENT checks...

Attention professionals: Stereo Review's new Model SR12 Stereo Test Record is also designed to be used as a highly efficient design and measurement tool. In the following tests, recorded levels, frequencies, etc. have been controlled to laboratory tolerances—affording accurate numerical evaluation when used with oscilloscope, chart recorder, output meter, intermodulation-distortion meter and flutter meter.

- 1,000-Hz square waves to test transient and high-frequency response of phono pickups.
- 500 to 20,000 Hz frequency-response sweep.
- Sine-wave tone-bursts to test transient response of pickup.
- Intermodulation test using simultaneous 400-Hz and 4,000-Hz signals.
- Intermodulation sweep to show distortion caused by excessive resonances in tone arm and cartridge.
- 1,000-Hz reference tones to determine groove velocity.
- 3,000-Hz tone for flutter and speed tests.

Sample waveforms—Illustrating both accurate and faulty responses are provided in the Instruction Manual for comparison with the patterns appearing on your own oscilloscope screen.

FREE Instruction Manual Includes Detailed Instructions, Charts, Tables and Diagrams.

Nothing is left to chance...or misinterpretation. Every segment of every band is fully, clearly, graphically explained. You'll know exactly what responses to listen for in each test. Which 'sounds and patterns indicate accurate performance...which ones spell trouble...as well as the cause of trouble and precise corrective measures to follow and help you pinpoint, analyze and cure your stereo headaches!

Don't waste another minute on less-than-perfect stereo—Order Your Model SR12 Stereo Test Record NOW!

Consider the hundreds—even thousands—you've spent on your setup and you'll agree $4.98 is a small price to pay for the most valuable performance tool ever made. So to be sure your order is promptly filled from the supply available, mail the coupon at right with your remittance...today!
ting down with pitchers of Rob Roys or Gin Slings to listen to Wee Bonnie Baker or Glenn Grey and the Casa Loma Orchestra, I guess that in 2010 A.D. people will be turning on in the evenings and cuddling up to their Grateful Dead recordings.

I tell you, friends, life is a wheel.  P.R.

GREETING BAND: The Greeting Band (vocals and instruments). My Baby Left Me; Mistake No Doubt; Let It Be Gone; Willie and the Pig; Laugh at the Judge; and five others. SHELTER SHE 9094 $5.98.

Performance: Slippery
Recording: Very good

The Greeting Band’s sole claim to fame traces to their early association with rough-and-tumble Joe Cocker, when they served as back-up group for his first American tour. With Cocker out in front doing his burry-throated imitations of Ray Charles, the Greeting Band was just fine. After all, who paid much attention to the scenery when Cocker’s near-spaetic posturing was dominating the stage?

Well, Cocker has gone on to bigger and better things, and the Greeting Band, despite their inheritance of one of rock music’s most intriguing names, just can’t hack it on their own.

The singing of Henry McCullough and Alan Spener can most charitably be described as anonymous, and the tunes, all originals except for Arthur “Big Boy” Crudup’s (misspelled Crudup’s) ‘misspelled Credup’s’ (on the liner and the label), are unseasoned meat-and-potatoes English blues-roots dull menu.

D.H.

MERLE HAGGARD: A Tribute to the Best Damn Fiddle Player in the World. Merle Haggard (vocals and fiddle); orchestra. San Antonio Rose; Reddy Poly; Miserie; Corinna; Right or Wrong; Brain Cloudy Blues; and six others. CAPITOL ST 638 $4.98, ® M 638 $6.95, ® 8XT 638 $6.98, ® 4XT 638 $6.98.

Performance: No tribute
Recording: Good

The best damn fiddle player in the world, according to Merle Haggard, was Bob Wills. Haggard says he created Western swing. Haggard says he wants to thank Bob for the fiddle he gave him. Haggard says he rounded up some of the original players in Wills’ group for the recording (on his own birthday), and that the thought of playing with them gave him “goose bumps and cold chills.” Haggard says he doesn’t know what to say when his twelve-year-old son asks him “Who is Bob Wills?” Haggard then proceeds, at great length, to tell us all who Bob Wills was.

He was a performer-composer (San Antonio Rose) who became a popular group during the Thirties known as the Texas Playboys. He achieved considerable popularity on records in the then secular c & w market. Haggard thinks he was the greatest thing since chopped liver. He might have been, but Haggard’s recreations of his hits sure ain’t.

P.R.

RONNIE HAWKINS: The Hawk. Ronnie Hawkins (vocals); instrumental accompaniment. Don’t Tell Me Your Troubles; Sick and Tired; Lonely Weekends; Drinking Wine Spo-Dee-O-Dee; Red Rover; Ooby Doby; and six others. COTILLION SD 9030 $4.98.

Performance: Country ho-hum
Recording: Okay

Either Ronnie Hawkins doesn’t know much about the life style of the hawk, or the title of this album represents his political beliefs. Hawks are graceful, soaring, swooping, mysterious creatures, inspiring poets to pick up pens and fearful chicken farmers to pick up shotguns. “Roadrunner” might be a better name if Hawkins insists on a bird in his title—the kind who inhabited the Terry-Toons preceding the double feature on Saturday afternoons at the movies in Southern towns. I mean that bird ran to such a fast tempo his feet became wheels. Hawkins’ tempes are frantic and unrelenting, at least on side one of his latest album. Hawkins has gathered a panfull of really wormy country chestnuts, and his attitude is as brutal to the songs as it is to the listener’s ear.

Things slow down on side two, but I attribute that to the fact that Ronnie is singing two beauties by Tim Hardin—The Lady Came from Baltimore and Black Sheep Boy—and Paul Simon’s Leaves That Are Green. Hawkins has enough sense to restrain himself here. These selections are given sensitive accompanying that feature some good piano, and organ solos. If you enjoy hard driving over bumpy country roads with an occasional patch of smooth pavement, this is your trip. Personally, I don’t much enjoy a heavy foot on the gas pedal, especially when the driver doesn’t seem to care.

Denny Hall: Listen! Listen! Listen! Denny Hall (vocals and guitar). Big Steel Prison Gates; Never Sow, Never Reap; The Last Ideal. We Can Use It Here; Corona; and five others. CAPITOL ST 647 $4.98.

Performance: Raw
Recording: Good

Ever since the Johnny Cash hit album recorded in a prison, the record industry has been trying for a sequel. And they are still trying. Denny Hall, an ex-con himself, is heard here entertaining at Corona Women’s Penitentiary. The ladies seem to enjoy it, and six of them, known as the Astrological Souliers, join him in a few numbers. Entertainment it is not; a social document it is not. It is an attempt to cash in on some unfortunate people under the guise of social concern. An example of the double-think involved here is that while the liner notes tell you how long Hall spent in prison, they never tell you why, whereas the notes about the girls include (in bold type) the offense and the sentence. I can only hope that the making of the recording provided some fun for the prisoners; to the casual listener it strikes a note even sadder than their miserable lot.

P.R.

JAKE HOLMES: So Close, So Very Far to Go. Jake Holmes (vocals); instrumental accompaniment. So Close; A Little Comfort; I Sure Come Home; We Can Use It Here; We’ve Come a Long Way; We’re All We’ve Got; Her Like Song; and five others. POLYDOR 24 4034 $4.98, ® 8F 4034 $6.98, ® CF 4034 $6.98.

Performance: Earnest rhetoric
Recording: Okay

The most important thing about Jake Holmes is that he’s earnest. So earnest that, like Goody Two-Shoes, his delight in his gift for helping others is so unbounded he can’t stop singing about it. Goody acquired knowledge and became wealthy. Jake should acquire guile and become just a little bit cynical, like the rest of us. Because then his gift for gentle lyrics might really work, and he, too, could become wealthy, and I could relax and enjoy Jake Holmes. Instead I’m embarrassed by his sincerity. My own cynicism suspects that, deep down,
Jake is suffering from a martyr complex. Just listen: "I can see that you're crying/ And I'm probably intruding/ But I've got a shoulder/ If you're looking to lean on/ When the wounds are still open/ And the feelings spill over/ It's hard to be touched/ Till the healings set in/ But I'll be near by/ Just in case I'm needed." I suspect the girl whom he's reassuring in the song doesn't need a big brother, but a romantic bite on her bare shoulder. But on the other hand, how can I deny the beauty in "She can make a pirouette of feeling/ Turn and turn inside me every time we touch/ She can shade the color of confusion/ So that all that matters is that nothing matters much." Mr. Holmes is a sensitive, talented poet who should find himself a good composer and a great arranger if songwriting is to be his medium of expression. Jake's music paints too many bluebirds flying out of velvet hearts, and his vocals remind me of all those nice young men who play at backers' auditions for Broadway musicals—in a word, forgettable. Life will someday scare hell out of Jake, and in running away he may lose his naivete, but the maturity he gains will perhaps make him a winner.

R. R.

RECORDING OF SPECIAL MERIT

THE BEST OF MISSISSIPPI JOHN HURT. Mississippi John Hurt (guitar and vocals). Here I Am, Oh Lord, Send Me; I Shall Not Be Moved; Nearer My God to Thee; Baby What's Wrong with You; It Ain't Nobody's Business; Salty Dog Blues; Coffee Blues; Avalon, My Home Town; Make Me a Pallet on the Floor; Since I've Laid This Burden Down; and eleven others.

VANGUARD VSD 19/20 two discs $5.98.

Performance: Classic Delta folk-blues
Recording: Good

When Mississippi John Hurt reappeared on the scene at those now-legendary Newport Folk Festivals in the early Sixties, he was first viewed as a relic of the Blues Past. True enough, he had a long and remarkable history as a Delta singer of considerable powers. But it soon became obvious that Mississippi John could do more. This two-disc release, recorded in concert at Oberlin College on April 15, 1965, and now part of a particularly valuable series from the Vanguard vaults, gives us a bright view of the kaleidoscopic quality of Hurt's skills.

There are plenty of blues for the purists—from traditional tales like Make Me a Pallet on the Floor to Hurt originals—Monday Morning Blues, Richland Women Blues, and the like. There are such ancient spiritual-gospel numbers as Here I Am, Oh Lord, Send Me, I Shall Not Be Moved, and Nearer My God to Thee. And there are novelties: a Spanish Fandango, a sing-along You Are My Sunshine (modified by Hurt's metrical habit of dropping a beat here and there), and a bit of fluff called Chicken.

But most of all, there is Mississippi John's extraordinary guitar playing and his remarkable presence. Few Delta blues players this side of Robert Johnson could match Hurt's sheer technical excellence with his instrument, and he made it come alive with the relaxed confidence of a performer completely at ease with both his material and his audience. Like Vanguard's recent Doc Watson concert recording, this one is a classic. Don't miss it.

D.H.

RECORDING OF SPECIAL MERIT

JANIS IAN: Present Company. Janis Ian
JULY 1971

FREE McIntosh CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh Solid State equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.

ST-4 Combination $159.00
Optional Two-Piece Cover $15.00
SL-8E arm $169.00

MAKERS OF THE ONLY SERVO DRIVEN DIRECT-LINE ARM

RABCO
11937 TECH ROAD
SILVER SPRING, MARYLAND 20904

CIRCLE NO. 36 ON READER SERVICE CARD

McIntosh Laboratory Inc.
1 Chambers St., Dept. SD7
Binghamton, N.Y. 13903

NAME
ADDRESS
CITY
STATE
ZIP

CIRCLE NO. 32 ON READER SERVICE CARD

105
Janis Ian must be one of the most intelligent people now writing songs. Her melodies are subtle and tricky, her lyrics are even more subtle, and she knows how to put the two together. Her Alabama, included here, is one of the most cleverly written songs I’ve heard lately. Given a sumptuous, old-fashioned, “state-song” melody, it starts out sounding like a song praising (as in Stars Fell on) Alabama, but then a verse about Mississippi lets us know what the song is about, even though nothing has been said directly about civil rights and Alabama has not been criticized at all. Then, wham, the line, “See the darkies’ laughing eyes.” It is delivered straight, but it could hardly sound more derisive.

There are several good things here: Weary Lady, a bluesy piece, is clearly the album’s outstanding number, but My Land, Hello Jerry, and On The Train are pretty and poignant. Janis’ vocals are clear and clean, although she is not the Voice of (seedy) Experience she would sometimes have us believe. She makes singing Weary Lady more difficult than it is necessary, but carries out her program even so. There are so many songs, so many shadings of melody and lyrics requiring so much concentration, that it’s all a bit tiring—but it’s better to be tired and happy than you-know-what and you-know-what.

JACK JONES: Sings Michel Legrand. Jack Jones (vocals); orchestra, Michel Legrand arr. and cond. The Years of My Youth; Pieces of Dreams; One Day; I Will Say Goodbye; Nobody Knows; and five others. RCA LSP 4480 $5.98, © PHS 1678 $6.95.

Performance: Une bombe (for another view, see page 77)
Recording: Gigantic

RCA has finally found a recital as limp as the feel of its new records, which droop over the turntable like wilted crépes. Jones went all the way to Paris to record this one, and Michel Legrand was there waiting for him with arrangements that sound like Berlioz on an ego trip or worse, and an orchestra the size of which might make Richard Strauss blush. According to the liner notes, Jones also went along with Legrand’s choice “of a marvelous (if somewhat out-of-the-way) studio.” My mind dizzily considered everything from the Gare du nord to Notre Dame.

Legrand, talented as he is as both composer and arranger, seems always just a hairbreath away from drowning us in treacle. And Jones, amiable as he is, has never struck me as a very dynamic singer. The result here is a billowing, listless album that comes alive only in its two best songs, The Windmills of Your Mind and What Are You Doing the Rest of Your Life? Legrand, of all French talents, seems to suffer most in translation. Something uniquely his own, which can be heard in the original recording of The Umbrellas of Cherbourg or The Young Girls of Rochefort, disappears when his work is done by English-speaking performers. I think it is that Legrand, in his French recordings, with his own company of musicians and, most important, almost anonymous vocalists (who do the dubbing for his operetta films), creates mood and nuance that cannot be captured anywhere else. It certainly is not here. Jones tries hard enough, but he is still Mr. American Bland. And the general atmosphere of Bayreuth-on-the-Seine that Legrand imposes envelops everything in a fog of folie de grandeur.

P. R.

McGUINNESS FLINT. McGuinness Flint (vocals and instruments). Lazy Afternoon; Bodang Buck; Mister Mister; Heritage; I’m Letting You Know; Let it Ride; Dream Darling Dream; When I’m Dead and Gone; Brother Psyche; You Who Got to Love; International. CAPITOL SMAS-625 $4.98.

Performance: No kick
Recording: Okay

If sweet voices, capable musicians, good intent, and honest hard work could make great pop groups, McGuinness Flint would be one. In-
are not bad songs, they just aren't in any way exciting. There is nothing to make you sit up and take notice. I have asked several rock freaks what they think of Scott McKenzie and the general attitude seems to be "Uh, well . . ."

This is a beautifully produced album, and the arrangements are really poetic and lyrical. One cut in particular, Dear Sister, is a thing of wistful loneliness. Beautiful flute work by Bunk Gardner and some goose-pimplly cello counter-melody by Edgar Lustgarten keep the whole thing flowing. I'd like to hear it done by Tony Bennett. I'd like to hear Scott McKenzie's songs sung by almost anybody but McKenzie. There is no particular depth to his lyrics and no real style to his singing. The effect is rather like sitting around a campfire in Yellowstone National Park on a summer night, listening to some college kid play his guitar and sing about ecology and evolution and purple sunsets.

R.R.

JOHN MAYALL: Back to the Roots. John Mayall (vocals, harmonica, piano, guitar); Eric Clapton, Mick Taylor, Harvey Mandel, Jerry McGe, McGee (guitars); Larry Taylor, Steve Thompson (bass); Keef Hartley, Paul Lagon (drums); Sugarcane Harris (violin); Johnny Almond (flute, saxophones). Prisons on the Road; My Children; Accidential Suicide; Groupie Girl; Blue Fox; Home Again; Television Eye; Marriage Madness; Looking at Tomorrow; and nine others. POLYDOR 25-3002 two discs $9.98, @ K 3002 $11.95.

Performance: Ragged to rich
Recording: Excellent

This elaborate album provides much to explain about, sometimes with alarm and sometimes with satisfaction. The graduates of various bands Mayall has rounded up here are impressive and famous musicians, and the result of it all is a flawed giant for English blues fans.

Only Eric Clapton could play as well as the guitarist heard on Prisons on the Road, Looking at Tomorrow, Goodbye December, and Home Again and still leave me vaguely unhappy because he holds back on some other numbers. Mick Taylor of the Rolling Stones doesn't leave that impression, sounding brilliant on lead guitar, especially in the slow Marriage Madness, and on slide in Force of Nature, but Mick doesn't seem to have had many solos allotted to him. Sugarcane Harris (the former Mothers of Invention violinist) does some bright improvising, particularly on the mediocre songs Groupie Girl and Devil's Tricks, and yet I cannot rid myself of the feeling he needed more time to practice with the others. Some of his performances were dubbed onto tapes already made by others in England; except in a couple of spots, they don't sound dubbed, but they sometimes do sound as if they were rushed.

Probably not Mayall's harmonica, though. His harp playing is good but not classy. It only seems classy when compared with his piano playing, which is in the thump-crunch tradition of Jerry Lee Lewis. But Mayall has evolved into one of the finest blues singers, American or European. He handles all the vocals here, and he wrote all the songs. As a band leader, Mayall just about is English blues. While American blues aficionados may find all English blues a bit brittle and overcomplicated, there's no denying it has emerged as a bona fide form of expression, without severing its roots, and practically all the credit for that goes to Mayall.
There's considerable variety here, with anti-dope lyrics, anti-marriage lyrics, anti-automobile (read pro-ecology) lyrics, fast breaks, slow laments, and a boogie piano solo. Though the band doesn't always play as beautifully as it does behind Taylor's lead in Marriage Madness or behind Clapton's lead in Looking at Tomorrow, time is the culprit, I think. If Mayall could have pushed the production schedules back a little and gotten all the people he wanted to assist him, he would have had a masterpiece here.

N.C.

RECORDING OF SPECIAL MERIT

NILSSON: The Point! Nilsson (vocals, narration); orchestra, George Tipton arr. and cond. Everything's Got Em; The Town (narration); Me and My Arrow; The Game (narration); Poli High; The Trial & Banishment (narration); Think About Your Troubles; The Pointed Man (narration); Life Line; The Birds (narration); P. O. V. Waltz; The Clearing in the Woods (narration); Are You Sleeping?; Oblio's Return (narration). RCA ISP 4417 $5.98.

Performance: Charming
Recording: Good

One of the nicer things about reviewing, I reflected while listening to this new Nilsson release, is being able to watch a good artist expand and grow. It would be somewhat unfair to call the album simply the "soundtrack" for the animated film The Point!, because it actually is both coherent and musical whole, written, narrated, sung, and produced by Nilsson. It stands by itself as a recording, without the support of the film, which was recently shown on television.

I missed the TV show, but if it was half as charming, funny, and benign as the record, then I really missed something. The Point! is a fairy tale, or perhaps a morality play, which may be for children but most certainly is for adults. It concerns the adventures of Oblio, the only child born with a normal head in a town all of whose citizens are proud of their magnificently pointed heads. At first his parents attempt to disguise his fearful departure from the norm, but it is discovered and little Oblio is banished. He then embarks on a series of light-hearted (but essentially serious) adventures, which unfortunately are all too pointedly pertinent to today's world. The Point! ends ironically but hopefully.

Nilsson's accomplishments in the writing and performing here are superb. The range and variety of his music and words are extraordinary, and he invokes the world of a child without ever being childish or, worse, patronizing. It is, all in all, a lovely album.

P.R.

EMITT RHODES: The American Dream.

Emitt Rhodes (vocals and instrumentals); Perry Botkin Jr., Bob Thompson, Ian Freebairn-Smith, Larry Marks arrs. Mother Earth; Pardon Me; Textile Factory; Someone Died; Come Ride, Come Away; Lip Lip Lip; Roll Sing; and six others. A & M SP 4254 $4.98.

Performance: Spin on, Emitt
Recording: Fine

Strange that a merry-go-round should be the image chosen by Emitt Rhodes to describe his sentiments (noted in the liner notes by Lance Freed), for his voice sounds like it just may be coming from the hollow insides of a wooden horse— the spotted one that goes up and down as the carousel goes round and round. Emitt's voice is a fragile, thinly-strung emotion that stretches out monotonally but finds its shadings in the reverberations of his poetry. For Emitt is a fine poet and a composer of delicate music. I'm struck with his depth of thought and musicality, knowing that he is only twenty. How truly formidable Emitt's work could be in the next decade! One of his songs that will undoubtedly grow old gracefully along with Emitt himself is You're A Very Lovely Woman. This ballad is haunting and seductive in its tender youthful rebuff.

Emitt Rhodes' "The American Dream" is like having a day on an undiscovered beach filled with warm sensitive sunshine, a gentle surf, and a richness of sand in which many happy hours can be spent sifting the hidden gems.

R.R.

JOE SOUTH: So the Seeds Are Growing.

Joe South (vocals and guitar); orchestra. So the Seeds Are Growing; No Fence around Me; Rolling On; Motherless Children; and six others.

Creating a charming childhood world

er. Capitol ST 637 $5.98, @ M 637 $6.95, @ 8XT 637 $6.95, @ 4XT 637 $6.95.

Performance: Commercial
Recording: Lush

What did I tell you? No sooner had Muscle Shoals, Alabama, been proclaimed the newest "in" sound for recordings than up pops Joe South, who, "like his fellow Atlantans Tommy Roe and Billy Joe Royal points his city rivaling Nashville as the South's major recording center." Well, at least South lives and records in Atlanta, unlike some of the Muscle Shoals crowd, who hop straight from a jet to a recording studio. If his new album were as pretentious as some of the things written about him, it would be a disaster. For instance, "His house in Atlanta, where you generally can find him, is where it happens; he goes there to think, to gestate, and produce the thoughts that have by now made the entire world sit up and do its own thinking. He emerges from time to time to sing, and say hello, and look around, and make notes."

In spite of his being made out to be such a regular Tolstoy (or is it a Swiss clock?), Joe South turns out to be an ingratiating singer-composer. His voice has some of Johnny Cash's quality, and his songs, particularly Rolling On
and No Fence Around Me, are good enough but suffer from too many touches of poesy. His biggest hit so far has been Games People Play (not included here), but comparing his version with that of Petula Clark. I can't understand how his made it and hers didn't. South has a bland manner, and the overly lush string arrangements here don't live things up very much. Truthfully, I couldn't notice any difference between the "Atlanta Sound" and the average overproduced commercial recording from anywhere.

I suppose Joe South is now back gestating, but I do hope that the next time he comes out to say hello and make notes he won't feel the need of quite so much "production" around him.

P. R.

KATE TAYLOR: Sister Kate. Kate Taylor (vocals); various musicians. Home Again; Ballad of a Well-Known Gun; Be That Way; Handbags and Gladags; You Can Close Your Eyes; Country Comfort; Lo and Behold; Jesus Is Just All Right; White Lightning; and four others. COTILLION SD 9045 $4.98, ® M 9045 $6.95, ® M 89045 $6.95, ® M 59045 $6.95.

Performance: Very good
Recording: Very good

Kate Taylor is a year older than Livingston Taylor and a year younger than James Taylor. She came from a musical family, and she is not the last Taylor we'll hear from. Alex, eldest of the family, has already recorded and there's still the youngest brother, Hugh, who is eighteen. Hugh is said to have a good voice but to be more interested, at the moment, in other things. Kate had to make two efforts to get this one down—she was too nervous to record the first time she tried it—but she sounds assured and relaxed (whether she was or not) as captured here.

Kate is no amateur; she has good control, a fair range, and a pleasant-sounding voice. It is a triumph of production, rather than of a singer. Peter Asher, who got James started with Apple and the Beatles, brought in such figures as Carole King (piano), Linda Ronstadt, Russ Kunkel, and Baby James himself to help out. He chose good songs, too, for the most part, including two by Carole King, two by Bernie Taupin and Elton John, a nice effort by Livingston and Peter Asher (Be That Way), and two by James, one of which, You Can Close Your Eyes, is among his finest.

It bothers me a bit that Kate, because her name is Taylor, will probably sell more records than such clearly superior singers as, say, Sandy Denny or Judy Mayhan or Lulu, but it takes many people to make a recording, and good producers like Asher should be rewarded, too. I expect this one will do that.

Tony Joe White. Tony Joe White (vocals); various musicians. Home Again; Ballad of a Well-Known Gun; Be That Way; Handbags and Gladags; You Can Close Your Eyes; Country Comfort; Lo and Behold; Jesus Is Just All Right; White Lightning; and four others. COTILLION SD 9045 $4.98, ® M 9045 $6.95, ® M 89045 $6.95, ® M 59045 $6.95.

Performance: Corny but nice
Recording: Good

Tony Joe White, the composer of Brook Benton's hit A Rainy Night in Georgia, is a talented artist, very much rooted in the musical patterns of now but with an innocent's philosophy (Continued on page 112)
STEPHEN SONDHEIM'S FOLLIES
A Pretty Girl Is Like a Malady, Etc.
By ARLENE CROCE

STEPHEN Sondheim's lyrics for the show Follies reach their acme of wit in the very first song, in which he rhymes "celestial" with "the best ya'll (agree)." The song, Beautiful Girls, is sung by an aging, flabby tenor (Michael Bartlett) as a line of women, former Follies girls attending a reunion in the crumbling shell of their old and soon-to-be-demolished theater, go tottering down a staircase in a creaky reprise of the famous Follies showgirl parade. The women are all either approaching menopause or are well beyond it, some are disgusted we feel turns to indignation: at least there isn't even a trace of irony left, and the disgust we feel turns to indignation: at least the old Follies never exploited human beings as harshly as they are exploited here. There probably never has been such a scene in an American musical before, but its offensiveness does not end with this one outburst. The whole show is permeated by a reeling fear and hatred of growing old; as staged, it continually juxtaposes past and present in such a way as to make the decrepitude of the present a rebuke to the romanticism of the past and a form of revenge against an old one. The old one has the characters confront life with "Gee whiz" or words to that effect; the new one has them say "Aw, . . ." (fill in the four-letter expulsive with which Gene Nelson ends The Right Girl, one of his two big numbers). It is strange to hear Follies praised, not only for its "adult" (read "sour") outlook but for its music and its dramatic continuity; the general impression is that it's a new type of musical like Company, the other Sondheim hit which was also produced and directed by Harold Prince. As a composer Sondheim may one day develop his own style, but here he still sounds like Leonard Bernstein's kid brother (let's not go into whose kid brother Bernstein sounds like), and models for many of the numbers in Follies existed as long ago as Kurt Weill's Street Scene and Lady in the Dark, two shows I'd just as soon not flash back to. The moralizing and factitiousness of those shows (which were also supposedly about real people) were dreary then; so was the semi-operatic form, which is preserved in Follies like a secret soft-drink formula. Some Weill-type songs are served up again too, conspicuously The Story of Lucy and Jesse, which is The Saga of Jenny all over again. To his credit, Sondheim seems to have offered his pastiches in a genial spirit, like a host showing us his collection of old movies; but to some critics this is enough to make him the king of a new genre.

Sondheim's book are not what one would call major, the show leaves us feeling that we have been fed these damaging romantic illusions about life by means of the simplest things imaginable—in popular songs and bright colors and the sight of pretty girls going up and down staircases. It suggests that we believed the songs we sang and accepted the frivolous extravaganzas as a metaphor for reality, and that now it's time to wake up and die. Later on in the show there's another ensemble number led by Mary McCarty called Who's That Woman, which paints a kind of Dorian Gray-like picture of hell in the House of Revlon. As the old girls bel it out ("Lord, Lord, Lord, that woman is me!"), they are joined in a fast tap by ghosts of their former Follies selves, succulent young girls in their physical prime who can have no idea, poor things, that they're doomed to go the way of all flesh. This number, which is the best ensemble number in the show—the only one in which anyone seems to be having any fun (though nobody has more fun than Ethel Shutta all by herself doing Broadway Baby)—happens to be the worst number in the original-cast album just released by Capitol. I don't know why it should be so cacophonous, although on the stage it is just that, and badly miked and synched (taps and chorus vocal) as well. I mention it only because, like several other numbers on the record, it conveys hardly anything of the show's grosser intentions to the listener. In that sense, Follies sounds better than it plays. Anyone who hasn't seen it staged might think Beautiful Girls a fairly amusing parody of Nacio Herb Brown and nothing more (a similar number in the movie The Night They Raided Minsky's managed to be inoffensively hilarious). In context, however, it's destructive and cruel.

Follies belongs to that line of musicals in which the songs are constantly being invaded by the plot and vice versa. The portion of Sondheim's score that is not Tin Pan Alley parody is concerned with Sally and Buddy and Phyllis and Ben, four middle-aged neurotics who come to the party and cry extensively into their beer about the days when they were young neurotics together. Sally is married to Buddy but still loves Ben and Buddy knows it. Ben is married to Phyllis and is a wreck of a hollow success and Phyllis knows it.

When they are not crucifying themselves and each other for their misspent lives and lost opportunities, they are flashing back to 1941 or thereabouts, when it all seemed so fresh and hopeful, but the Forties are no less soapy than the Seventies. Just as the present-day Sally, Buddy, Phyllis, and Ben seem to be acting away for the camera of John Cassavetes, their Forties counterparts seem to have stepped right out of Cover Girl. It's just a new showbiz convention against an old one. The old one has the characters confront life with "Gee whiz" or words to that effect; the new one has them say "Aw, . . ." (fill in the four-letter expulsive with which Gene Nelson ends The Right Girl, one of his two big numbers). It is strange to hear Follies praised, not only for its "adult" (read "sour") outlook but for its music and its dramatic continuity; the general impression is that it's a new type of musical like Company, the other Sondheim hit which was also produced and directed by Harold Prince. As a composer Sondheim may one day develop his own style, but here he still sounds like Leonard Bernstein's kid brother (let's not go into whose kid brother Bernstein sounds like), and models for many of the numbers in Follies existed as long ago as Kurt Weill's Street Scene and Lady in the Dark, two shows I'd just as soon not flash back to. The moralizing and factitiousness of those shows (which were also supposedly about real people) were dreary then; so was the semi-operatic form, which is preserved in Follies like a secret soft-drink formula. Some Weill-type songs are served up again too, conspicuously The Story of Lucy and Jesse, which is The Saga of Jenny all over again. To his credit, Sondheim seems to have offered his pastiches in a genial spirit, like a host showing us his collection of old movies; but to some critics this is enough to make him the king of a new genre.
The best number on the record is Dorothy Collins' torch song Losing My Mind, another out-of-context triumph. In the show Miss Collins' character (Sally) is such a bore that by the time her big moment comes it has no impact. Alexis Smith and Gene Nelson, who made many of those gee-whiz movies for Warner's in the old days, are at it again under the new dispensation, which means that they come at you this time from the dark side of the moon. Miss Smith, who hasn't changed in the slightest, is still the most unexciting rich girl at the country club, but now she has all the lines and delivers them with the kind of sportive leer that lets you know fag-hag status isn't far off. (Lauren Bacall, look out!) Mr. Nelson, no longer so sunny or so bland, is simply tired in a tired part as Buddy, the salesman who sings about the Right Girl (and doesn't get to dance at all). But his exhaustion and his voice, which has grown hoarse with a texture like wood shavings, have character and even poignancy. John McMartin as Ben, the decaying foundation executive with nothing to live for, is as colorless on the record as he is in the show. Surely the role must have been intended for Dennis Morgan, Miss Smith's former Warner's colleague and the man who sang A Pretty Girl Is Like a Melody in The Great Ziegfeld.

Then there's Yvonne De Carlo's whiskey baritone in I'm Still Here, paying tribute to her own longevity with lyrics like: "I've been through Herbert and J. Edgar Hoover/Gee, that was one and a half/When you've been through Herbert and J. Edgar Hoover/Anything else is a laugh." Even if the song were any good it would seem a bit much with ladies like Ethel Shuttta, Fifi D'Orsay, and Justine Johnston in the cast. (Miss Johnston's song, in which she is upstaged by a loud young soprano, has been mercifully omitted from the record.) Musicals about foundation men who are cracking up and women who are haunted by their youth are probably going to be around for a while, if Follies is any indication of a trend. The prospect is bitterly ironic. Follies is supposed to be an anti-"escape" musical, a show about real life, but because its version of life is a simple reversal of a banal theme, putting darkness in place of light, despair in place of hope, it offers us nothing but escape by another route. The preferred refuge is guilt, wonderful, all-absorbing, universal guilt, the banality of the Seventies. We don't believe in Prince Charming any more; why should we believe in the toad the witch turned him into?

FOLLIES (Stephen Sondheim). Original-cast recording. Alexis Smith, Gene Nelson, Dorothy Collins, John McMartin, Yvonne De Carlo, Fifi D'Orsay, Mary McCarty, Ethel Shuttta, Michael Bartlett, and others (vocals). Chorus and orchestra, Harold Hastings cond. Orchestration by Jonathan Tunick. Prologue—beautiful Girls; Don't Look At Me; Waiting for the Girls Upstairs; Ah, Paris!; Broadway Baby; The Road You Didn't Take; In Buddy's Eyes; Who's That Woman?; I'm Still Here; and nine others. CAPITOL ST-761 $6.98, @ 4X0 761 $7.98, @ 8X0 761 $7.98.

Lowest of the LOW! Shamelessly Low Prices...

As one of America's largest wholesale distributors, we're guilty of shamelessly low prices. Our buying volume has made our prices the lowest. We seriously doubt you can find one lower—and that we're proud of. What's more, at S.C.A. you can select from hundreds of NEW, Factory Sealed, Full Warranty, Brand name, Hi-Fi Stereo components. If it's in the Hi-Fi, Audio field...we have it!

Write for a lowest of the low quote...we're not ashamed.

STEREO CORPORATION OF AMERICA
2122 UTICA AVENUE, BROOKLYN, NEW YORK 11234 (212) 338-8555

CIRCLE NO. 47 ON READER SERVICE CARD

FAMOUS IN EUROPE* FOR MICROPHONES FOR OVER 40 YEARS

BEYER

*TELL EVERYONE WE'VE ARRIVED!
Revox Corporation • 155 Michael Drive • Syosset, N. Y. 11791

CIRCLE NO. 39 ON READER SERVICE CARD
MACEO WOODS AND THE CHRISTIAN TABERNACLE CONCERT CHOIR: 

**Step to Jesus**, Christian Tabernacle Concert Choir (vocals), instrumental accompaniment, Rev. Maceo Woods cond. *Step to Jesus; I'll Get Home Someday; It Pays to Serve Jesus; It's Been a Mighty Good Day; Reach Out and Touch (Somebody's Hand)*; and six others. VOLT VOS 6013 $4.98

**Performance:** Superb contemporary gospel

**Recording:** Not good

Well, folks, here's a recording you really should hear. I know, gospel music may not fill a particularly large part of your listening time, but I think you'll be pleasantly surprised when you discover just how topical—and, not incidentally, how superb—the music on this recording really is.

As with most gospel groups, the soloists in the Christian Tabernacle Concert Choir are identified only by name. Too bad. I'd like to know more about them, to find out what made them decide to commit themselves to this form of music. The choice of material, however, makes the recording really worthwhile. The songs are not only excellent, but they also present a varied and interesting picture of the kind of gospel music that is being sung today.

**RECORDING OF SPECIAL MERIT**

**AGES AGO (W. S. Gilbert - Frederic Clay)**

Jo Anne Brieff, Nell Evans, Joan Lindstrom, David J. Seatter, William Tost, and David Vosburgh (vocals); Benjamin Sloane (piano); Jay Miller (harp); Dan Francabandiero (harmonium); Frederick S. Roffman cond. WSR 245 two discs $7.95 (plus sales tax for New York residents, available by mail only from F. S. Roffman, 230 Riverside Drive, New York, N. Y. 10025).

**Performance:** Fascinating rarity

Recording: Pretty good

In her fascinating book *Gilbert Before Sullivan*, Jane W. Steadman describes how the "passion for technically innocent merriment" in Victorian England sent audiences for whom the theater was considered frivolous and "unsuitable" off to lectures, dramas, and minstrel shows in search of innocent entertainments. Capitalizing on this urge to be amused without being corrupted, German Reed and his wife Priscilla started their "gatherings" in 1856 in London at the Gallery of Illustrations on Regent Street, where what were set down were "illustrations" rather than plays, acts were called "parts," and roles "assumptions.

The public that flocked to these popular entertainments saw not a set "but an elegant drawing room." The atmosphere was more like that of a ballroom than of a theater. In the Reeds' entertainments, mimicry was the staple—until they began hiring such writers as F. C. Burnand and W. S. Gilbert, and such composers as Frederic Clay and Arthur Sullivan, and the "illustrations" started turning into full-fledged operettas. Although Gilbert, then in his early thirties, never collaborated with Sullivan for the Reeds, they both worked for the couple separately, and it was Sullivan's friend Clay who introduced them, earning the Reeds the nickname of "godparents to the Savoy operas.

Burnand and Sullivan wrote *Cox and Box_ for the Reeds. Gilbert and Clay wrote *Ages Ago_—the first libretto of Gilbert's not set to music borrowed from other sources. *Ages Ago_ was the Reeds' biggest hit, and made their 1870 season. Later Gilbert and Clay wrote *Princess Toto, The Gentleman in Black, and Happy Arcadia_. When a revival of *Ages Ago_ made Bryan's Opera House in London in 1875, another was promised "just one century hence."

"A New York enthusiast has kept that promise with this first recording of the piece. The plot has to do with an ancient castle in Scotland owned by an alderman and tallow chandler and run by his housekeeper Mrs. MacMotherly, a Scotswoman disconcertingly gifted with second sight who was convinced the place is haunted. It is—by the portraits in the picture gallery who come down from their frames as the portraits do in *Ruddigore_, at midnight, once every hundred years, to transfer the deed of the place to a new owner. This (Continued on page 115)
THE MOST SPECTACULAR SOUND EXHIBITIONS of STEREO FIDELITY EVER AVAILABLE!

DEMO RECORD
Offers you a greater variety of sound than has ever before been included on a single disc.

This record is the result of two years of intensive research in the sound libraries of Deutsche Grammophon Gesellschaft, Connoisseur Society, Westminster Recording Company and Cambridge Records Incorporated. The Editors of Stereo Review have selected and edited those excerpts that best demonstrate each of the many aspects of the stereo reproduction of music. It is a series of independent demonstrations, each designed to show off one or more aspects of musical sound and its reproduction. Entirely music, the Record has been edited to provide self-sufficient capsule presentations of an enormous variety of music arranged in a contrasting and pleasing order. It includes all the basic musical and acoustical sounds that you hear when you listen to records, isolated and pointed up to give you a basis for future critical listening.

WIDE RANGE OF DEMONSTRATIONS
- Techniques of Separation & Multiple Sound Sources
- Acoustical Depth & Ambiance of Concert Hall
- Sharp Contrasts of Dynamics
- Crescendo & Diminuendo
- Vary High & Vary Low Pitched Musical Sounds
- Polyphony (2 or more melodies at once)
- With Both Similar & Contrasting Instruments
- Tonal Qualities of Wind, String & Percussion Instruments
- Sounds of Ancient Instruments
- Sounds of Oriental Instruments
- Sounds of Singing Voice, Both Classically Trained and Untrained

13 SUPERB SELECTIONS


FREE Descriptive Booklet Enclosed includes description of each selection and the purpose behind its demonstration.

BINAURAL RECORD
Created specifically for playback thru stereo headphones, this unique record presents sound of unsurpassed realism.

Binaural recording re-creates the directions, distances, and even the elevations of sounds better than any other recording method. The super-realism of binaural recording is accomplished by recording the acoustical input for each ear separately, and then playing it back through stereo headphones. Thus the sound intended for the left ear cannot mix with the sound for the right ear, and vice versa.

Binaural recording offers the listener the identical acoustical perspective and instrument spread of the original. The sound reaching each ear is exactly the same as would have been heard at the live scene.

“MAX”—GENIE OF BINAURAL RECORDING. “Max,” a specially constructed dummy head, cast in silicone rubber, duplicates the role of the human head as an acoustical absorber and reflector of sound. Super-precision capacitor microphones were installed in Max’s ears so that each microphone would pick up exactly what each human ear would hear. The result is a demonstration of phenomenal recorded sound.

STARTLING REALITY. The Binaural Demonstration Record offers 45 minutes of sound and music of startling reality. You'll marvel at the eerie accuracy with which direction and elevation are re-created as you embark on a street tour in binaural sound—Sounds Of The City... Trains, Planes & Ships... a Basketball Game, a Street Parade. A Street Fabrication Plant, The Bird House at the Zoo—all demonstrating the incredible realism of binaural sound reproduction.

MUSIC IN BINAURAL. The musical performances presented on the Binaural Demonstration Record transport you to the concert hall for a demonstration of a wide variety of music. Selections total 23 minutes, and include examples of jazz, organ, and chamber music.

Although headphones are necessary to appreciate the near-total realism of binaural recording, the record can also be played and enjoyed on conventional stereo systems.

Paymnt MUST BE ENCLOSED WITH ORDER

NOTE — THE STEREO DEMONSTRATION RECORD ONLY IS AVAILABLE IN YOUR CHOICE OF 33 1/2 RPM OR 45 RPM

RECORDS • Ziff-Davis Service Division 595 Broadway • New York, N.Y. 10012

My check (or money order) for $__ is enclosed.

Print Name
Address
City
State
Zip

State Sales Tax is charged on records delivered within New York State.

Stereo Review Stereo Demonstration Records at $5.98 each, postpaid.
Stereo Review's Binaural Demonstration Record at $5.98 each, postpaid.

Payment must be enclosed with order.

PAYMENT MUST BE ENCLOSED WITH ORDER

Only $598 each

July 1971

113
THE FIRESIGN THEATER STRIKES THRICE

By ERIC SALZMAN

On three Columbia discs, a quartet of media-culture tragicomediains creates a new kind of satirical theater.

The Firesign Theater, a group consisting of Phil Proctor, David Ossman, Peter Austin, and Peter Bergman, are tragicomic virtuosos playing on themes taken from media culture—commercial radio, television, and films. They started (and still maintain) a largely improvisatory radio hour on KPFA, the noncommercial, listener-supported Pacifica radio station in Los Angeles. They are already, a scant couple of years later, living leg- ends in their own time, with three Columbia albums and an underground reputation of extraordinary proportions. They remain resolutely “undiscovered,” largely unknown to the mass media, print or electronic, whose Joyce’s Ulysses. No kidding. I don’t expect to be believed when I say that this is one of the most genuinely moving musical/theatrical moments in contemporary art...but listen for yourself. Laugh-In was never like this.

Let me repeat my conviction that the Firesign Theater is a major creative force in performance media today. It has grown in the alternate culture, almost entirely outside of the conventional channels of theater and performance, and is scarcely known even to the avantest of the current theater garde. On one level it is pure pop, and funny as hell. It is also far-out, media-oriented, precise, metaphysical, even in a curious bass-ackward way tremendously poetical. It is hard to figure out what exactly is going on, and yet it is simple enough for any kid to dig. The literal-minded will go crazy, and others will say it doesn’t mean anything at all. But they’re wrong. This is some of the most trenchant commentary I know on contemporary life in America, in the form of high far-out comedy transformed into Something Else by timing, rhythm, sound, and vocal mimicry.

THE FIRESIGN THEATER: Don’t Crush that Dwarf, Hand Me the Pliers. The Firesign Theater (Philip Proctor, David Ossman, Philip Austin, and Peter Bergman); St. Louis Aquarium Choraleers; The Android Sisters; the Ambiant’s Noyes Chorale; and others. COLUMBIA CS 9884 $4.98.


THE FIRESIGN THEATER: Waiting for the Electrician or Someone like Him. The Firesign Theater. COLUMBIA CS 9518 $4.98.
makes for the Merriment of the action, which anticipates the devices not only of Ruddigore but of Iolanthe, but Mr. Clay's music, which is long on charm, is rather short on Merriment. He has a Handelian way of taking Gilbert's libretto and turning it into a piece with real repetitions, defeating the headlong flow that Sullivan so well appreciated. Even so, some of the songs, like the sprightly The Subject Drop of the finale and It Does Perplex, Annoy and Vex, live up sparklingly to their lyrics. The lyrics, and Gilbert's Saturnian, mock-Victorian dialogue, are what make Ages Ago deserving of this disinterment.

The cast here is made up of professionals with musical-comedy—some with Gilbert and Sullivan—appearances behind them, and they sing and act out the dialogue creditably. The accompaniment is by piano, harmonium, and harp, just as it was back at the Reeds'. And Mr. Roffman has included several numbers which were added to the early scenes of the piece sometime after it started its original run. These include When Nature Sleeps and Eh! What Is That You Say?, which are two of the best in the score. Despite the shortcomings of that score, and only an intermittent flicker of real style in the playing and singing, anyone with a more than casual interest in the Gilbert who grew into England's wittiest librettist should welcome the opportunity to trace that talent back to its first big success. The records are accompanied by an interesting brochure, but no librettro. There is one, however, included in Miss Steadman's Gilbert Before Sullivan. Following along with it is virtually indispensable, what with those Scotch brochures and the convoluted settings composed by the earnest Mr. Clay. The last side offers an encore of Clay's I'll Sing Thee Songs of Araby from the cantata Lalla Rookh, based on the poem by Thomas Moore, and well sung by Nell Evans.

THE MUSIC LOVERS (Ken Russell-Tchaikovsky). Original soundtrack recording. Raphaël Orozco (pianist); April Cantelo (soprano). London Symphony Orchestra, André Previn cond. UNI 5217 $5.98.

Performance: Bits and pieces

Recording: Excellent

When I was growing up and going to see movies about composers, there were a lot of them. There was Schubert marching along the road in springtime with his little pupils, whistling sprightly masterpieces; Beethoven shaking his fist at the elements and playing the "Pathétique" with his free hand; and Liszt making love to wealthy ladies. And as I recall, there was one in which Tchaikovsky was shown floating down some stream in a boat, his head in the lap of Madame von Meck. Now it turns out he never had her in his lap at all; according to a recent Russian film biography of Tchaikovsky, called "The Music Lovers," he would send her letters and she would send him money, while he threw his heart at some merciless young man.

Well, movies about composers may have changed, but original soundtrack recordings made from them have not. Big works are plundered for their highlights, like jewels plucked from the eyes of idols—yet what are they without their settings? Almost the only piece heard intact on this record of the track from The Music Lovers is the Letter Scene from Eugene Onegin, sung with fervor by April Cantelo, on a band labeled "Tchaikovsky Playing His New Opera." Raphaël Orozco plays the second movement from the Piano Concerto No. 1, but I wasn't ready for it, not having heard the first movement yet. "Night Train to Moscow" turns out to be portions of the "Pathétique" and Manfred Symphonies. The "Canal Sequence" is the Andante from the String Quartet No. 3 (could that be the canal he used to float down with Mme. von Meck?). "Dreams at Brailov" brings us to the Romeo and Juliet Overture—a part of Part I, while Part II is dispensed with in less than three minutes on another band. And so it goes. It's all rather frustrating for anyone who seriously wants to hear the music, but a smart listener, given such titles as "Nina's Madness" and "Firework Sequence," should be able to figure out the plot without having to see the movie at all—which would represent a saving of both time and money. Mr. Previn conducts with polish, if with little discernible passion.

THE ROTHSCILDS (Jerry Bock-Sheldon Harnick). Original-cast recording. Paul Hecht, Keene Curtis, Leila Martin, Jill Clayburgh and Hal Linden (voices); orchestra, Milton Greene cond. COLUMBIA S 30337 $5.98, © ST 30337 $6.98.

Performance: Mediocre

Recording: Okay

It may well be that the secrecy surrounding Europe's richest, most powerful banking monopoly, the house of Rothschild, is the underlying cause for failure of the Broadway musical based on its story. What we get on stage are only carefully sifted guesses, smalmaisy family problems, the by now familiar oppression of Jews in European ghettos, and the Horatio-Alger-like rise of a family to unparalleled heights through chutzpah. I mention this only to give those responsible for this mediocre musical a way out, though they have not been half so shallow, and rather grubby. The only love story in the score, I'm in Love! I'm in Love!, is shallow, and rather grubby. The only love song in the score, I'm in Love! I'm in Love!, is a can-cam (some love affair, if the man wants to get through it at that pace). Bock and Harnick obviously wanted to get finished with their musical in a hurry. In the finale, Papa Rothschild blesses his princes (merchant) and wishes them the greatest joy a man can know. God help us if anyone's planning Son of the Rothschilds.

R. R.
KENWOOD creates a magnificent new stereo receiver—with superabundant power, superb performance, and the most imaginative touch of all: its own dynamic microphone for “mike-mixing” in any mode with front panel sound level control. Another KENWOOD “plus” to enhance your stereo enjoyment.

Specifications:
- Power Output, (± 1 dB) 260 watts @ 4 ohms;
- (RMS) 90/90 watts @ 4 ohms
- Frequency Response, 15-40kHz
- ± 1.5 dB
- Power Bandwidth (IHF), 12-30kHz
- Sensitivity (IHF), 1.6 uV
- Capture Ratio, 1.5 dB
- Selectivity (IHF), 55 dB
- Stereo Separation, 35 dB at 1kHz
- Price, $379.95
- Genuine walnut cabinet, $19.95

Features:
- Input Jacks for 2 Phonos, 2 Aux, Tape Deck
- Output Terminals for 3 sets of Stereo Speakers plus Center Channel
- Separate Preamp Output, Main Amp Input
- Front Panel Speaker Selector Switch
- Step-type Tone Controls for Bass, Treble and Mid-range to provide a continuously variable presence control

For complete information write:

KENWOOD
15711 South Broadway, Gardena, California 90247
72-02 Fifty-first Ave., Woodside, New York 11377

CIRCLE NO. 29 ON READER SERVICE CARD

Performance: Solid
Recording: Cavernous
Playing Time: 36'40"

If this cassette from the Musical Heritage Society Beethoven-symphony series, Paul Kletzki conducting, were my only basis for the work of MHS in processing the low-noise, high-sensitivity TDK tape, I would have to give them low marks indeed. For, though Kletzki and the Czech players come out with a perfectly solid and respectable reading, the sonics are marred by the cavernous reverberation of the recording locale (presumably the Rudolfinum in Prague), which not only muddies the musical texture but adds to the background-noise level. Fortunately, I own an MHS cassette of Jean-François Paillard's performance of Handel's Royal Fireworks Music, which proves to my satisfaction the high quality of the TDK tape stock, providing the original master is of top quality in sonic cleanliness and low noise level. I'd advise cassette buyers to skip this Beethoven Seventh, and opt for either the DGG-Karajan or the Columbia-Bernstein. D.H.


Performance: First-rate
Recording: A bit rough
Playing Time: 51'

This finely proportioned and tautly dramatic reading is an eloquent reminder of what a loss to music was the death in 1958 of the gifted Spanish conductor Ataulfo Argenta, then in his mid-forties. Even the rather rough-edged and hum-afflicted sonics cannot spoil for me the excitement, poetry, and structural cohesion of Argenta's conception of the work. I do object, however, to the unnecessary division of the Scène au champs movements between the two sides of the cassette (as on the disc). Nevertheless, at the price, this cassette represents top musical value. D.H.

BRUCH: Scottish Fantasia, Op. 46 (see MENDELSSOHN)

GRIEG: Concerto in A Minor, for Piano and Orchestra; Norwegian Dance No. 2; March of the Dwarfs; Ingrid's Lament; Columbia

Reviewed by NOEL COPPAGIE • DAVID HALL • IGOR KIPNIS • PAUL KRESH

STEROE TAPE

GRIEG: Concerto in A Minor, for Piano and Orchestra; Norwegian Dance No. 2; March of the Dwarfs; Ingrid's Lament; Columbia

Pierres the heart with Solveig's Song
Strange Music; I Love Thee; Solveig's Song; In the Hall of the Mountain King. Van Cliburn (piano in Concerto); Mario Lanza (tenor); Eileen Farrell (soprano). Philadelphia Orchestra, Eugene Ormandy cond.; Boston Pops Orchestra, Arthur Fiedler cond.; New Philharmonic Orchestra, Morton Gould cond. RCA © RK-1174 $6.95.

Performance: Ultra-romantic
Recording: Excellent
Playing Time: 52' 18"

Grieg is one of those unique composers whose music manages to straddle the world of classical and the world of popular music. This compilation is good evidence, for all the works listed above are heard, wholly or in part, in the movie Song of Norway—some in their original form and some as transformed for Broadway and Hollywood.

Grieg's piano concerto is a love story of Romantic music—sentimental, self-pitying, yearning, melting, playing on our willingness to indulge ourselves. Yet the work, for all its countless replayings over the air and in concert halls and even the cloring use of it in Song of Norway, retains its power to move and to cleanse the spirit with its moods of exaltation and despair and its honest outpouring of pure song. It has rarely been given a more sweeping, impassioned, unashamedly Romantic and incisive performance than it gets here from Mr. Cliburn, with glowing support from the Philadelphia forces, and the cassette is worth owning only for this segment—despite the maddening side break that occurs unforgivably at the height of the third movement.

There are other pleasures here. Morton Gould leads a charming performance of the Norwegian Dance No. 2; Arthur Fiedler gives the March of the Dwarfs and Ingrid's Lament the once-over-lightly; and Eileen Farrell pierces the heart with her rendition of Solveig's Song. Even Mario Lanza's performances of Strange Music, a song fashioned from Grieg's melodies especially for the treacly Song of Norway, and I Love Thee are powerful and pure. The program ends vigorously with a Boston Pops run-through of In the Hall of the Mountain King. This is simple stuff, breaking no musical sound barriers, but perennially appealing and superbly done here. P.K.


Performance: Excellent
Recording: Very good Bruch
Playing Time: 23' 58"

The veteran Italian-born violinist Alfredo Campoli has always been among the most stylish and dependable performers of the Rontic repertoire. Both works here are spécialités de la maison, the Bruch being especially well played and lucidly recorded. Though both recordings date from 1959, the solo-violin sound in the Mendelssohn seemed curiously raw next to the Bruch (processing problems?). I did not have a disc on hand for comparison. Campoli faces heavy cassette competition in the case of the Mendelssohn—Szyrny, Zukerman, Stern, Grumiaux—but the $4.95 price tag gives this cassette an edge in value. D.H.


Performance: Excellent
Recording: Excellent
Playing Time: 52' 18"

This is a fine performance of these two works, the only real flaw being the rather muddled sonics. D.H.

(Continued on next page)

Explanation of symbols:
- = reel-to-reel tape
® = four-track cartridge
© = eight-track cartridge
® = cassette

The first listing is the one reviewed: other formats (if available) follow it.

Monophonic recordings are indicated by the symbol ®; all others are stereo.
ORFF: Carmina Burana. Jutta Vulpiai (soprano); Hans-Joachim Rotzsch (tenor); Kurt Rehn (baritone); Kurt Hübenha (baritone); Leipzig Children’s Choir; Radio Leipzig Chorus and Orchestra, Herbert Kegel cond. HI-LI-ODOR © 331 0006 $4.98.

Performance: Lively
Recording: A mite muffled
Playing Time: 58’

Modest price, alert performance, and fine vocal solo work are the most attractive features of this East German recording of the perennially popular Carmina Burana. The recorded sound may seem somewhat less bright than that of the high-powered rival cassette issues from Columbia, DGG, RCA, and Angel, probably because this performance was taped in a broadcast studio. Nevertheless, for those who are price-conscious and musically particular, this Heliodor cassette is an excellent value. D.H.

**RECORDING OF SPECIAL MERIT**

PUCCINI: La Bohème. Renata Tebaldi (soprano), Mimi; Hilde Gueden (soprano), Musetta; Giacinto Prandelli (tenor), Rodolfo; Giovanni Inghilleri (baritone), Marcello; Fernanda Corena (bass), Schaunard; Rafael Arie (bass), Colline; other soloists; chorus and orchestra of the Accademia di Santa Cecilia, Rome, Alberto Erede cond. RICHMOND © B0626001 two cassettes $10.95.

Performance: Sympathetic and well sung
Recording: Very good
Playing Time: 106’ 8’

This first cassette version of Bohème is unusual in that it is a monophonic recording. It is a reissue of a 1951 release, now made available on London’s lower-priced Richmond cassette series. (These, incidentally, are produced in England, unlike other items from the London catalog, which are duplicated and distributed here by Ampex.) The monophonic sound, I find, lends itself rather well to cassettes, and this recording, in spite of its date of origin, sounds quite respectable. The fairly close-up orchestral treatment, together with a very clear vocal focusing (only a few loud climaxes become constricted), makes this version an extremely pleasant one. As for the performance, it is a leisurely one in pace, but it is also very sympathetic, very romantic in tone, and exceptionally expressive on the part of the singers. The cast is led, of course, by the fairly young Tebaldi, which should be quite enough for most opera fanatics. The Rodolfo does not have the vocal beauty of, say, Bergonzi, but he does make the role credible and dramatically convincing. Perhaps Hilde Gueden makes Musetta, more of a Viennese soubrette than one might like, but the cast as a whole is a distinguished one. The cassette boxes contain a cast list and synopses.

I.K.


Performance: Dance marathon
Recording: Good to great
Playing Time: 71’ 35’

If your chief demand of music is that it just play on and on—and on, these new “two-LP” cassettes from Deutsche Grammophon should be just the thing for you—although the price does seem rather high for a program only eleven minutes more than an hour in length. “Russian Ballet” is the title and Russian ballet is what you get—complete suites from Swan Lake and Sleeping Beauty in lush performances by the National Philharmonic of Warsaw that cannot, however, compete in voltage with the high-powered versions by Dorati and Rozhdestvensky (but those aren’t available on cassettes anyhow, so I guess we must be grateful for what is). Rozhdestvensky and the Leningrad Philharmonic do turn in the most headlong, intoxicating Gayne suite that’s ever been recorded, so the program winds up with a great deal of elan.

The suite from Swan Lake is a lovely sampling of highlights and favorites from the ballet about those white (good) and black (bad) swans and the prince who falls in love with one of them, made up mainly of material from the second act and featuring such favorites as the famous waltz, the swan dance, and the czardas of the four swans, arms akimbo, that always brings down the house. The Sleeping Beauty Suite offers five highlights from the ballet: about the princess asleep in the forest under a spell, waiting for a kiss from the prince to wake her up, and culminates in that beautiful famous waltz, the swan dance, and the czardas of the four swans, arms akimbo, that always brings down the house. The Sleeping Beauty Suite offers five highlights from the ballet: about the princess asleep in the forest under a spell, waiting for a kiss from the prince to wake her up, and culminates in that beautiful waltz. Gayne is the ballet that Sabre Dance comes from. It takes place on an Armenian cot, tells of the struggles of a girl on a farm, and tells of the struggles of a girl and her family to keep an evil husband Ghiko, but this in no way interferes with the intoxicating flow of brilliant melodies and irresistible rhythms that make the music a popular delight. This Gayne, however, has already turned up previously on another DGG cassette coupled with Rimsky-Korsakov’s Suite from Coq d’or (C 922 022), so make sure you aren’t just buying the same performance over again.

GENNADY ROZHDESTVENSKY Leads an intoxicating Gayne suite

P.K.

ENTERTAINMENT

BREWER & SHIPLEY: Weeds. Brewer & Shipley (vocals); various accompaniments. People Love Each Other; Pig’s Head; Oh, Sweet Lady; Too Soon Tomorrow; Witchi-Tai-To; Lady Like You; Rise Up (Easy Rider); and three others. KAMA SUTRA @ M 52016 $6.95, © M 82016 $6.95.

Performance: Good
Recording: Excellent
Playing Time: 30’ 30’

The approach may remind people of Simon and Garfunkel, but Brewer and Shipley sound more like Sandler and Young, at least part of the time. Even so, I’m not giving up on them. The quality of their songs is fairly high, with melodies that flow easily and cleanly and lyrics that only occasionally are sickeningly oriented toward the youth market. Their version of an Indian chant, Witchi-Tai-To, consisting of a brief verse repeated perhaps a dozen times, does stir up some excitement, and may be the best rendering of this sort of thing since Donovan’s Atlantis. The arrangements are predominantly acoustic and generally don’t intrude too much, although there are several points at which they are unnecessarily complicated, I think. The weaknesses are about what you’d expect of a baritony blend of two male voices—they couldn’t sing Dylan’s All Along the Watchtower properly in a million years, because the inflections it demands are too subtle. But they tried it anyway. Most of the cuts are pleasant, if not ingenious, though, and I expect this recording to wear better than some that seem more exciting at first.

N.C.

**RECORDING OF SPECIAL MERIT**

BILL COSBY: When I Was a Kid. Bill Cosby (comedian). Herinia; Buck Jones; Snakes and Alligators; My Boy Scout Troop; My Brother, Russell; My Father, Dogs; Frogs. UNIVERSAL CITY © UNI 2-73100 $6.98.

Performance: Bright
Recording: Good
Playing Time: 30’

Bill Cosby is still mining his vein of childhood recollections, and coming up surprisingly often with pure comic gold. I didn’t much care for his raunchy monologue about the time he got a hernia picking up a sewer cover to retrieve a baseball, but his reminiscences of Saturday afternoons at the movies, his days as a Boy Scout getting rigged up in elaborate hugging gear from the local Army and Navy Store and climbing, fully equipped, onto a trolley car to a local park, and being caught by his father trying to change himself into a wolf-man in front of the bathroom mirror, are the stuff of true comic autobiography. On this cassette, the listener is also treated to further chapters in the life with the comedian’s brother, including the time their father threatened to slap the kid’s face off and went ahead and actually did so. Its a glorious surrealistic moment. Cosby also has an uncommon insight into the workings of the minds of frogs and dogs, and offers anec- dothes of his encounters with both species. The program never lags, or lies about human nature. He never exploits his blackness, either—never plays on the special pleading of “ethnic” references to embarrass us into empathy. It’s a funny tape.

P.K.

DUKE ELLINGTON: In Canada. Duke Ellington (piano); Ron Collier Orchestra, Ron Collier cond. Aurora Borealis; Nameless Hour; Collage #3; Fair Wind; Silent Night; Song and Dance. DUKLA © 73 5069 $6.98.

Performance: Too posh
Recording: Good
Playing Time: 37’ 10’

STereo Review
I don't know what the Duke was doing in Canada when they cut this one, but I rather wish he hadn't gone. Mix a little Bartok and a little Gershwin with a little Ellington, and what you get just won't stay down. Yet that's the sort of combination Ron Collier and his colleagues, Gordon Delamont and Norm Symonds, seem to be after in their compositions, which sound just as pretentious as their titles—Collage #3, Aurora Borealis, Nameless Hour—would seem to indicate (and I challenge anyone to tell which composer wrote what without a score card). What we have here is a Canadian brand of cocktail music on a gigantic scale—most pieces pushed far beyond their welcome. Through all this, Ellington keeps up a brave obbligato on the keys, diverting us despite the sumptuous backgrounds rather than in concert with them. A glittering waste.

P.K.

BUFFY SAINTE-MARIE

Straight to the point

or messed up by overproduction. Incidentally, the Mike Nesmith finger puppet looks as if it's just been insulted by Buzz Tillstrom. Sugar Crisp, however, is one of the truly great cold cereals of our time. N.C.

RECORDING OF SPECIAL MERIT

BUFFY SAINTE-MARIE: She Used to Wanna Be a Ballerina. Buffy Sainte-Marie (vocals, guitar); instrumental accompaniment. Rollin’ Mill Man; Smack Water Jack; Sweet September Morning; She Used to Wanna Be a Ballerina; Bells; Helpless; Moratorium; The Surfer; and three others. Vanguard © M 59311 $6.95, © M 89311 $6.95.

Performance: Vibrant

Recording: Very good

Playing Time: 35'

The most facile observation about Buffy Sainte-Marie is that she isn't very subtle. She is the Nina Simone of the Indians, differing from the rest of us propagandists mainly in that she doesn't try to fool herself into believing she isn't a propagandist. With lyrics that come straight to the point and a throbbing, rather overdone vibrato, she lets us have it. She usually finds fine melodies to go along with her agit-prop, and she has that extraordinary sense of rhythm which Kay Starr, who was part Cherokee, used to claim was a natural Indian trait. Anyway, this is one of Buffy's better recordings. She shouldn't have tried Neil Young's stylized Helpless, but almost everything else can stand well, and Rollin' Mill Man, Sweet September Morning, and Bells came out particularly well. Side two is better than either side of most albums, and side one far outshines this one's gem.

N.C.

THEATER MUSIC

ANNIE GET YOUR GUN (Irving Berlin). Original cast recording. Ethel Merman and Ray Middleton (vocals); unidentified orchestra and chorus. Doin' What Comes Naturally; Moonshine Lullaby; You Can't Be a Man with a Gun; I'm an Indian Too; They Say It's Wonderful; Anything You Can Do; I Got Lost in His Arms; I Got the Sun in the Morning; The Girl That I Marry; My Defenses Are Down; Who Do You Love, I Hope; There's No Business Like Show Business. Decca © 73-9018 $6.95.

Performance: Bang-up

Recording: Ruined by echo

Playing Time: 36'50"

I didn't have the good fortune of seeing Ethel Merman as Annie Oakley when Annie Get Your Gun opened in New York in 1946. What I did see, some years later, was a French adaptation of the musical in Paris called Annie du Far Ouest. The French like their spectacles, and that was a big one: a (reasonably well-blond) Pavilion drag with a tendency to raise both arms to the ceiling and wiggle her fingers in the manner of Hildegard, while hundreds of chorus girls kicked their legs out of their pioneer mini-skirts in a Western version of the can-can. There was a big train scene in which the porter went through the cars banging on a gong shouting "premier service." There's No Business Like Show Business turned out to be Il faut monter les chevaux par les cerceaux—"You've got to ride horses through hoops," or something of the sort. But Annie is made of sturdy stuff. When she outshouts marksmanship Monseigneur Frank Butler in the competition, she not only brought down a paper pigeon but the entire Parisian house. The musical has stayed alive through several revivals, including one at Lincoln Center twenty years after it opened, a movie, and even a mangle on television. It's always a delight. And Merman, as everyone knows, is the perfect incarnation of Annie, from the moment she opens that big mouth and sings "Folks are dumb where I come from/They ain't had any learnin';/Still they're happy as can be/Doin' what comes natcherly..." It all came natural to Ethel, who, legend tells us, conquered not only the heart of Buffalo Bill but the whole of New York with her large-than-life performances.

Of the sixteen numbers in the score, twelve are preserved in Decca's original-cast recording, which, except for one or two songs, concentrates entirely on Miss Merman and Mr. Middleton as the Frank Butler she can do anything better than, but loses. What a score it is! Hir after hits coming tumbling out as the tape goes by: You Can't Get a Man with a Gun, They Say It's Wonderful, Anything You Can Do, I Got the Sun in the Morning, The Girl That I Marry, My Defenses Are Down,... On and on, and I am sorry to say that Decca's engineers couldn't keep their hands off the original, and have added an insufferable echo to the sound—and if there's anything that strident Merman voice box doesn't need added to it, it's echo. Otherwise, the program is a complete delight.

P.K.
COMMERCIAL RATE: For firms or individuals offering commercial products or services, $1.25 per word (including name and address). Minimum order $12.50. Payment must accompany copy except when ads are placed by accredited advertising agencies. Frequency discount: 5% for 6 months; 10% for 12 months paid in advance.

READER RATE: For individuals with a personal item to buy or sell, 80¢ per word (including name and address). No minimum! Payment must accompany copy.

GENERAL INFORMATION: First word in all ads set in bold caps at no extra charge. All copy subject to publisher's approval. Closing Date: 1st of (for example, March issue closes January 1st). Send order and remittance to: Hal Cymes, STEREO REVIEW, One Park Avenue, New York, New York 10016.

EQUIPMENT

WRITE for quotation on any Hi-Fi components: Sound Research Laboratories, 2122 Utica Avenue, Brooklyn, New York 11234. R.C. Mitchell, Box 2576 PVS, Hialeah, Florida 33012. Write for free catalog.

 saver over 33-1/3% on a pair of one of the world's best floorstanding speaker systems shipped direct to you from the factory...try them in your home for thirty days. Write: KGLI, Inc., Water Street, Lewiston, Maine 04240.

NEW low prices on all stereo components and tape recorders. Write for our free catalog. Stereo Corp. of America, 2122 Utica Avenue, Brooklyn, New York 11234.

SPECIAL prices on ROBERTS equipment–write STAR- LIGHT PHOTOGRAPHIC COMPANY, 15889 Cover- det, Detroit, Michigan 48238.

LOW, LOW, LOW, PRICES, on Audio Equipment, L.P. Records, and Tapes. All factory fresh, 1st quality items. Trained servicemen, Engineers, and Industry for 20 Years. Operate at 1.65 volts, 60 milliamps. Order 2 fot $2.98. DOW. Data sheet and instructions included. Mon- tanto Company, Hobby Section, 10131 Bub Road, Cupertino, California 95014.

CONSTRUCTION PLANS: Laver ... $2.00. Investigation aids-2 FM microphone transmitters ... $1.00. FM Tele- phone transmitter ... $2.00. Sound telescope ... $2.00. Space microphone transducers $2.00. Free equipment and kit catalog. Howard, 20174 Ward, Detroit, Michigan 48235.


RECORDING TAPE. Most brands available at variable prices. TAPE RECORDING CENTER, Box 38, Murray Hill Station CT, New York, New York 10016. (Indicate cassette, open - reel, other)

RECORDS


FREE 64 PAGE CATALOG offers hundreds of recordings of rare jazz, blues, and classical music. Some records priced as low as $1.00 each! All late recordings. In Stereo only. MHS RECORDS, Box 932-HS, New York, New York 10002.

"HARD TO GET" records—all sales. Record Exchange, 942 Seventh Avenue, New York, New York 10019.

POPULAR organ albums factory direct. Concert Recording, Lynnwood, Calif. 90262.

Cassettes, Pre-recorded Spoken Word—over 100 titles —educational, including language. Cassette and 8-track machines at no extra charge. All cassettes, subject to publisher’s approval on a first come-first served basis. For sale: The Radiola Company, Box H, Dept. B, Croton-on-Hudson, New York 10520.

Cassettes, Pre-recorded Spoken Word—over 100 titles —educational, including language. Cassette and 8-track machines at no extra charge. All cassettes, subject to publisher’s approval on a first come-first served basis. For sale: The Radiola Company, Box H, Dept. B, Croton-on-Hudson, New York 10520.

RENT 4-track open reel tapes—all major labels—3,000 different—free brochure. Stereo-Parti, 55 St. James Drive, Santa Rosa, California 95404.

RECORDS

FREE 1000 RECORDS LIST—spent $5.00 for top $200.00 worth of records. For free listsend $5.00 to: BAGGY’S RECORD & TAPE RE-TAPE, 8 Track, Cassette. Discount 50%. Write for other great tape savings. Exhibio West, Box 5174-5, Mission Hills, Ca. 91340.

STereo REVIEW TELR DIRECTORY for people. Free catalog. The Coast Tape Library, Box 2262, Palm Village Station, Hialeah, Fl, 33012.

RENT 4-track open reel tapes—all major labels—3,000 different—free brochure. Stereo-Parti, 55 St. James Drive, Santa Rosa, California 95404.

RECORDS Protector—save $15.00-$10.00 on a pair of Space-monitor space-tracker $2.00. Free equipment and kit catalog. Howard, 20174 Ward, Detroit, Michigan 48235.

RECORDING price 1800’ reels, dozen $12.00, 1200’ reels, dozen $10.00, postpaid. Sample 12” $1.00 guaranteed. Mitchell, Box 2581, El Cajon, California 92021.

FREE Electronics Parts Flyer. Large catalog $1.00 deductible. Box 724, Redmond, Wash. 98052.

RECORDS

BARGAIN MUSIC, Tape, Equipment Catalog, 25¢, Saxi- tone, 1776 Columbia Road, Washington, D.C. 20005. RECORd SALE, 4303-4250, Reel, B-Track, Cassette. Discount 50%. Write for other great tape savings. Exhibio West, Box 5174-5, Mission Hills, Ca. 91340.

BEST RECORDING TAPE ... Pre-recorded Stereo Tapes, stereo-cassette-cassette, Tape, Equipment Catalog, 25¢, Sterling, Illinois 61801.

RECORDING tape 1800’ reels, dozen $12.00, 1200’ reels, dozen $10.00, postpaid. Sample 12” $1.00 guaranteed. Mitchell, Box 2581, El Cajon, California 92021.

FREE 64 PAGE CATALOG offers hundreds of recordings of rare jazz, blues, and classical music. Some records priced as low as $1.00 each! All late recordings. In Stereo only. MHS RECORDS, Box 932-HS, New York, New York 10002. (Indicate cassette, open-reel, other)

RECORDS submitted to: BAGGY’S RECORD & TAPE RE-TAPE, 8 Track, Cassette. Discount 50%. Write for other great tape savings. Exhibio West, Box 5174-5, Mission Hills, Ca. 91340.

RECORDS

RECORDING tape made by top American manufactur- ers and distributors, not even remotely comparable to the "white box", 2400” mylar, $2.29; 1800” mylar $1.69; 1200” acetate $0.79. Send for information and quantity pricing. Ashley Audio Electronics, 218 Columbia Street, Utica, New York 13502.

STEREO TAPES. $4.95 postpaid. CAG, 3906 Nanton Place, Philadelphia, Pa. 19154.

RECORDING TAPE. Most brands available at lowest prices anywhere. Recording Tape Wholesalers, Box 844, Orange, Conn. 06477.

OLD Radio Programs Catalog. $1.00 (refundable). Radio Vault, 15335 S.W. S.W., Michigan 49509.
FABULOUS OPERATIC LP RARITIES at reasonable prices. Free list, Box 1052, New York City 10022.

PROTECT your records—Poly sleeves for jackets 5¢; Inner sleeves 4¢; Poly lined paper 10¢; White jackets 25¢. Minimum order $5.00. Record House, Hillburn, N.Y. 10931.


SHOW ALBUMS, Rare, Out-of-Print LPs, Free large list. Broadway-Hollywood Recordings, Georgetown, Conn. 06491.

PROTECT YOUR RECORDS. Cardboard replacement covers, plastic lined sleeves, 78 and 45 heavy sleeves, hinged record set boxes, 12”, 10”, 7”. Cabo 123, 89 East Main St., Columbus, Ohio 43201.


FREE CATALOG—magnets on cassettes, ARG, 341 Cooper Station, New York City 10003.


PLANS AND KITS

CONVERT your scope. Dual trace FET switch, $10.00. Trigger error $24.95. Kits include semiconductor boards, instructions, HAMLIN TECHNICAL PRODUCTS, Triggersweep, HAMLIN TECHNICAL PRODUCTS, 75219.

INSTRUCTION

LEARN Electronics Engineering mostly by correspondence. Free Brochure, Dr. G.9, Grantham School of Engineering, 1505 N. Western Ave., Hollywood, California 90027.


PERSONALS

MAKE FRIENDS WORLDWIDE through international correspondence. Illustrated brochure free. Hermes, Berlin 11, Germany.

PHOTOGRAPHY—FILM, EQUIPMENT, SERVICES


CAMERAS, Lenses, Equipment. We trade, sell, buy. Write for quotations. Photoshop, 136 West 32nd Street, New York 10001.

HYPNOTISM

Free Hypnotism, Self-Hypnosis. Sleep Learning Catalog! Drawer H400, Ruidoso, New Mexico 88345.

SLEEP LEARNING. Hypnotic Method. 92% effective. Details free. ASR Foundation, Box 7021eg HC Station, Lexington, Ky. 40502.

MOVIE FILMS


EDUCATIONAL OPPORTUNITIES


COLOR SLIDES

35MM COLOR SLIDES: Paintings, Travel, Flowers. Send for Free listings. FOTOSHOP, 130 West 32nd Street, New York 10001.

AUTHORS’ SERVICES

AUTHORS! Learn how to have your book published, promoted, distributed. Free booklet "2D," Vantage, 515 West 34 St., New York 10010.

MUSICAL INSTRUMENTS


MAKE $1.00 Per Sale selling engraved metal Social Security plates. Free Sales Kit. Engraving plates, Box 19460-7834, Jacksonville, Florida 32207.

START small, highly profitable electronic production in your basement. Investment, knowledge unnecessary. Postcard brings facts, Barte GRA, Box 15083, San Francisco, California 94115.

PAINTINGS AND PRINTS

PORTRAITS and Coats of Arms exquisitely painted in oils by English artist. Portraits painted on high quality canvas or from your photograph. Send for free information to: Jacqueline Studios, 17 Barnsberry Crescent, Tolworth, Surry, ENGLAND.

GOVERNMENT SURPLUS


RUBBER STAMPS

RUBBER ADDRESS Stamps $2.00. Signature $3.50. Free Catalog. Jackson's, Box 443-3, Franklin, Park, Ill. 60131.

MISCELLANEOUS

WINEMAKERS. Free illustrated catalogue of yeasts, equipment. Samplex, Box 12776, Minneapolis, Minn. 55412.

WINE Recipes and catalog, 25¢. Country Winemaker, Box 191E, RFO 1, Marlowequest, Mass. 02739.

AS YOU CAN SEE THESE COLUMNS, more than 300,000 monthly buyers of STEREO REVIEW Magazine are doing the same. These readers share with each other the satisfaction derived from active involvement in the enjoyment of recorded music. STEREO REVIEW readers look to the pages of the CLASSIFIED each month for prime sources of products and services of interest to them—Components, Accessories, Tape, Records, Special Services—everything they need to make their favorite special interest even more enjoyable. Are they buying from you? They will, you know, if your classified advertising appeals regularly to these columns. To appear in the next available issue, forward copy and payment to: Hal Cymes, Classified Advertising Manager, STEREO REVIEW, One Park Ave., New York, N.Y. 10016.

RETAIL DISPLAY PLAN

All magazine retailers in the United States and Canada interested in earning an allowance for the display and sale of a minimum of five publications of the Ziff-Davis Publishing Company, to be paid quarterly on the basis of ten percent of the cover price of each sold copy, assuming that all terms and conditions of the contract are satisfied, are entitled to do so and are invited to write for full details and copies of the contract to Mr. J. Robert Gallicano, Single Copy Sales Director, Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016.
THE IMPORTANCE OF DEMAGNETIZING

Regular readers of this column have been told before of the need periodically to "demagnetize" or "degauss" the heads, capstan, and tape guides of their recorders. The reason is that these parts all tend to accumulate a small earth's magnetic field, it's a little harder to use than the less sensitive model. A magnetized capstan, in other words, can do to your tapes what a worn stylus does to your discs. How often, then, should you demagnetize?

To Ampex goes the credit for discovering an inexpensive way to answer this question. They wanted an instrument for their professional multi-track recorders that would show when the head stack needed to be degaussed to avoid damaging irreplaceable master tapes, and they found one at the R. B. Annis Co., 1101 North Delaware St., Indianapolis, Ind. 46202. This firm produces two low-cost pocket magnetometers—little two-inch meters that measure magnetism. The Model 20 ($5.65 postpaid) deflects full scale when the red dot on its case touches an object radiating a magnetic field of 10 gauss. A similar, more sensitive model with a +5, 0, -5 scale ($7 postpaid) reads full scale with only 2.5 gauss. Also available for $2 additional is a clip-on extension probe for reaching into the head area of audiophile recorders. I mostly scale with only 2.5 gauss. Also available for $2 additional is a clip-on extension probe for reaching into the head area of audiophile recorders. I mostly scale with only 2.5 gauss.

According to Mr. Annis, even a 1-gauss field, as measured with a pocket magnetometer, can degrade a tape's performance. Having measured 3 gauss of residual magnetism on some recorders, however, I took that value as typical, and conducted an experiment. Beginning with a really magnetically clean machine, I recorded tones of 15,000 Hz at 7 1/4 ips and 10,000 Hz at 3 3/4 ips. I then installed a removable guide post, magnetized to three gauss, along the tape path. After ten passes, each test tone suffered an "erasure" of a little more than 1 dB compared to a similar tone not exposed to the magnetized post. This loss isn't catastrophic, but I, for one, play many tapes more than ten times. In a similar test, starting with a noise-free bulk-erased tape, an additional hiss level of about 0.7 dB was induced. Indeed, turning up the volume control I could hear hiss added during a single pass.

The safe policy, then, is to demagnetize whenever the magnetometer shows residual magnetism in heads, guides, and capstan. Turn the recorder off and remove tapes from the vicinity, and make sure you don't turn the head demagnetizer either on or off when it is near the machine. Just bring its probe up to the head and slowly withdraw it, afterwards checking the results with the magnetometer (incidentally, always keep the magnetometer well away from the demagnetizer). According to Mr. Annis, some audiophile head demagnetizers just aren't strong enough to remove residual magnetic fields from capstans (mine wasn't). He will shortly have one available for $21 postpaid that is five times stronger than usual models. I've got my order in!
THERE WAS A MISSING LINK IN OUR LINE, TOO

Actually we found there was something missing in everyone's line. No one had a really high powered, high styled receiver for a reasonable price. And you asked for one. So we did the only human thing. We built the S-7300 AM/FM stereo receiver. The Missing Link.

The S-7300 has 160 watts (IHF) - 42 + 42 watts R.M.S. at 8 ohms, both channels driven, with only 0.6% distortion. Plus, solid state ceramic FM IF filtering and 1.8 µV FM sensitivity. We included inputs for two phonos plus mikes, and, provision for up to four tape recorders. There are illuminated selector indicators, and one special feature: an oiled walnut cabinet at no extra charge.

Normally, it costs up to $400 to get all these features. But we wanted a truly evolutionary receiver. So we priced the S-7300 at just $319.95. It's priced just above our best selling S-7100, just below our top-rated S-8900. But in the $300 price range, no other receiver has more power, features and styling than our new S-7300.

Ask your audio man to demonstrate our Missing Link. The evolutionary S-7300 AM/FM stereo receiver.


SHERWOOD SOUNDS EXPENSIVE
OLIVER P. FERRELL loves it.
JULIAN D. HIRSCH loves it.
LARRY KLEIN loves it.
C. G. McPROUD loves it.
JULIAN M. SIENKIEWICZ loves it.
GEORGE W. TILLETT loves it.
LARRY ZIDE loves it.
HIGH FIDELITY loves it.

...how does it perform? The answer is — very well indeed.
— AUDIO, November, 1970

It is not often that such excellent specifications are offered for a "compact" system, nor is it often that speakers of such small dimensions are capable of providing an overall acoustic response to below 50 Hz and above 18,000.
— AUDIO, November, 1970

The Electro-Voice Landmark 100 is very worthwhile hearing if you are considering a compact system — or even if you aren't. It is a thoroughly clean, balanced, and musical sound system, and produces more and better sound from a pair of 0.5-cubic-foot speakers than anything else on the market.
— ELECTRONICS WORLD, October, 1970

We found the Electro-Voice Landmark 100 is an outstanding performer when compared with many AM/FM Stereo systems and is certainly remarkable when compared to compact systems.
— ELEMENTARY ELECTRONICS, Jan-Feb., 1971

...The Landmark 100 appears to give the listener the ideal mix between direct and reflected sounds and judging from the response below 300 Hz the "Servo-Linear" feedback system can really perform in almost any listening environment.
— POPULAR ELECTRONICS, October, 1970

It all comes down to this. The system delivers a big, likable sound that is remarkably clean no matter how loudly you play it.
— STEREO & HI-FI TIMES, December, 1970

The verdict is unanimous. The Electro-Voice LANDMARK 100 sounds great. At least that's the opinion of the top reviewers of audio equipment. Drop us a line and we'll send you a full set of their unexpurgated comments. We'll also include complete literature and a list of showrooms where you can conduct your own unbiased review of the LANDMARK 100. The lovable music system.

ELECTRO-VOICE, INC., Dept. 714F
616 Cecil Street, Buchanan, Michigan 49107

a GULTON subsidiary