The Experts Look at the New Stereo Cartridges

Vacation Music: A Guide to Portable FM Radios

The Fabulous Age of the Castrati

Best Records: Basic Repertoire
Grooveless record demonstrates anti-skating on the Garrard Lab 80

All tone arms have an inherent tendency to skate inward toward the center of the record. The tone arm motion you see here (playing a blank record with the Lab 80 anti-skating control disengaged) is caused by a definite side pressure which can cause distortion, rapid record and stylus wear.

Now, with the Lab 80 patented anti-skating control in-position, skating force has been neutralized, and you can see the arm tracking perfectly as if the record had grooves!

For complete demonstration, see Page 2
This is a coupon for people who aren't square.

Only a square buys phonograph records at store prices when the Citadel Record Club offers huge discounts on all labels. Mail this coupon for a lifetime membership.

Now, for less than the cost of a single stereo record, you can be a member of the unique Citadel Record Club for life. See for yourself how much Citadel can save you on all phonograph records (not just a few specials!), as well as on all 4-track recorded tapes.

Here is what Citadel offers to all its members:

Discounts! Tremendous price reductions on all records and tapes; in certain cases you save as much as 55%.

No obligations! You buy as few or as many records as you wish. No agreements to sign.

All labels! Any record, album or tape that's in print is available at a discount to Citadel members. Your choice is unlimited.

Promptest service! Orders are usually shipped the same day as received, rarely later than the next few days. Citadel is famous for speed.

100% guarantee! Guaranteed factory-fresh, unplayed, defect-free records and tapes; if not, you are entitled to an immediate replacement.

Free Schwann catalog! Every new member gets a free copy of this 300-page guide to all long-playing records in print.

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Please enroll me as a lifetime member of the Citadel Record Club. I understand that I am entitled to all membership privileges without any obligation to buy anything, ever. If, after 30 days, I am not fully satisfied, I understand that my $5.00 will be immediately refunded.

☐ I am enclosing $5.00 for Record Division membership. Send Schwann Catalog.

☐ I am enclosing $5.00 for Record and Tape Division membership. Send Schwann and Harrison catalogs.

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City __________ State __________
Zip __________

(If you don't have scissors, remember that only a square hesitates to tear out the whole page.)
Grooveless record demonstrates anti-skating on the Garrard Lab 80

Due to the offset angle of any cartridge, and the rotation of the record, all tone arms have an inherent tendency to move inward toward the center of the record. This skating force, a definite side pressure against the inner wall of the groove, is a major cause of poor tracking, right channel distortion, and uneven record wear.

Your Garrard dealer has been supplied with grooveless records, which make it possible to visualize the skating force and how it is overcome in the Lab 80. With the demonstration below, he can show you how the Lab 80 protects your records and tracks both stereo channels more evenly, more perfectly than any other integrated record playing unit.

1. "This is a blank record with no grooves. I place it on the Lab 80."

2. "I set the tracking force at two grams, for example. Since each click of the stylus pressure gauge on the tone arm equals ¼ gram, I turn it for 8 clicks."

3. "I then slide the counterweight on the anti-skating control to the second notch... equivalent to the tracking force I have just set on the tone arm."

4. "Now you can actually watch the strength of the skating force. I start the Lab 80, but flip the anti-skating control over and out of operation. Note that as soon as I put the stylus on the grooveless record, the arm moves rapidly... with force, toward the center."

5. "Now watch me neutralize the skating force. I swing the anti-skating control back into position... and the arm tracks as perfectly as if there were a groove in the record! If I were playing a regular record—with the side pressure gone and resulting distortion eliminated—the sound would be cleaner."

The patented Garrard method of neutralizing skating force is but one of a number of Lab 80 developments. Compare! You'll find this Lab 80 feature is simple and foolproof... works perfectly without springs, balancing devices or other delicate mechanisms. Visit your dealer and see it in operation, or send $1.00 to Garrard for your own grooveless demonstration record. For complimentary copy of 32-page illustrated Comparator Guide, write to Garrard, Department GG-126, Westbury, New York 11590.
THE MUSIC

THE CASTRATI
Their phenomenal voices dominated two centuries of opera

H. Pleasants

THE BASIC REPERTOIRE
Updatings and Second Thoughts, Part Two

M. Bookspan

BEST OF THE MONTH
Reviews of outstanding new record releases

JAMES GOODFRIEND

CHARLES IVEs: MAKING UP FOR LOST TIME
Two new releases herald the end of the lean years

J. Geri Lees

TEN SOUNDTRACKS TEN
Jazz at the movies: too much too late?

THE EQUIPMENT

HI-FI Q & A
Answers to your technical questions

D. Lehr

NEW PRODUCTS
A roundup of the latest high-fidelity equipment

H. Fantel

AUDIO BASICS
Audio Health Plan Continued

H. Fantel

TECHNICAL TALK
Testing stereo compact: Hirsch-Houck laboratory reports on the Knight-Kit KG-415 tape recorder and the Dynaco PAS-3X preamplifier kit

J. H. Hirsch

PHONO CARTRIDGES
The engineers have their say

J. H. Fantel and D. Lehr

FM PORTABLE RADIOS: A GUIDE FOR BUYERS
Take good music with you on vacation

B. Evans

TAPE HORIZONS
Classroom Tapes

D. McInnis

THE REVIEWS

CLASSICAL

ENTERTAINMENT

TAPE

THE REGULARS

EDITORIALLY SPEAKING

LETTERS TO THE EDITOR

WHERE TO BUY IT; ADVERTISERS' INDEX
It is one of the more comforting proofs of our common humanity to be made to realize, from time to time, that our minds do seem to work more or less alike, that our ideas, however fresh they may seem to us, are all too often nothing at all new under the sun, and that our hard-won insights have borne the scrutiny of many a mind's eye before. Good evidence of this is the trick often played on us by the synthesizing habit of our mental processes: we no sooner get to turning a new idea over in our minds than that same idea immediately comes rushing at us from all quarters, from books, magazines, newspapers, conversation. Whether it is the work of Emerson's Oversoul or of Teilhard de Chardin's Noosphere, other minds have been—and are—there before us, turning over the same evidence, reaching the same conclusions.

It should surprise no one that, for the staff of any magazine of the arts, the subject of criticism is a prime mental toy. And so it was, a couple of weeks ago, inspired by a miffy letter from a reader taking one of our reviewers to task, that I came up with an Insight: What is criticism? What should it be? What is its purpose in human affairs? It is the only weapon we have to defend what is noble in the arts from the evil of mediocrity. New Idea? The very next day it turned up in a chance quotation from the writings of the Danish philosopher Søren Kierkegaard, and a week later, in Saturday Review, Joseph Wood Krutch, writing on the wasteland of the mass media, aptly quoted John Stuart Mill:

"Capacity for the nobler feelings is in most cases a very tender plant, easily killed, not only by hostile influences but by mere want of sustenance. . . Men lose their high aspirations as they lose their intellectual tastes, because they have not the time or the opportunity for indulging them; and they addict themselves to inferior pleasures, not because they deliberately prefer them, but because they are either the only ones to which they have access, or the only ones they are any longer capable of enjoying."

And then suddenly appeared Rebecca West, of all people, writing in the New Republic way back in November, 1914:

". . . only through art can we cultivate annoyance with insensitivities, powerful and exasperated reactions against ugliness, a ravenous appetite for beauty; and these are the true guardians of the soul. . . . Our first duty is to establish a new and abusive school of criticism . . . it is not worth an editor's while to veil the bright rage of an entertaining writer . . . no economic force compels this vice of amiability. It springs from a faintness of the spirit, from a convention of pleasantness, which, when attacked for the monstrous things it permits to enter the mind of the world, excuses itself by protesting that it is a pity to waste fierceness on the things that do not matter."

They do matter. We have suffered a blight of namby-pamby and self-interested criticism for so long that most people are shocked by anyone who dares to speak his mind, unnerved by the prospect of looking too closely at their unexamined prejudices. Driven by the powerful engines of paid publicity and cheered on by lazy, venal, or intimidated critics, how many monsters of mediocrity are even now rehearsing in the sleek chariots of their irreversible reputations? The distinguished literary critic R. P. Blackmur is reported to have said that it is the duty of the critic to commit himself to his own mind, to go it alone, as a prophetic gesture that society might or might not understand. We can never have too many critics with that kind of courage.
Bravos for the Dual 1019 from these leading audio publications are, understandably, music to our ears. Come sight-read with us!

**Hi-Fi Stereo Review (Appassionato):** "I found the Dual 1019 to be exactly as represented—without a doubt one of the finest record-playing mechanisms I have used."

**High Fidelity (Con Forza):** "Offers a level of superior uncompromised performance that—regardless of type, manual or automatic—marks it as a splendid piece of equipment."

**Radio-Electronics (Amabile):** "Rumble . . . as good a figure as I have seen for any turntable — and better than I have seen for any automatic . . . Flutter . . . the equal of virtually anything on the market . . . Pitch purists will never have a quarrel with Dual . . . A gentler entrance into a record groove cannot be imagined."

**Electronics World (Animato):** "The anti-skating force adjustment, when set according to the instructions, was quite accurate and resulted in substantial reduction in measured distortion of the outer groove wall channel at very high velocities."

**Audio (Con brio):** "Removes any vestige of doubt that may have lingered . . . no gulf at all exists between manual and automatic."

**American Record Guide (Con Animato):** "The Dual 1009 is superb, but the 1019 beats it on every measurement . . . If it is presently the highest-priced automatic at $129.50, no matter. Quality always costs — and this Dual is worth every last penny!"

**Fugue for your own horn (Serioso):** Complete reprints of these impressive test reports are yours for the asking. But why wait? Ask your franchised United Audio Dealer to audition the Dual 1019 for you in his showroom. Like so many owners, you'll enjoy unlimited encores in your own home.
LETTERS TO THE EDITOR

A New Name for "Grammy"

I second William Anderson's expressed wish (May Editorial) that NARAS find a replacement for "that nasty little word 'Grammy.'" One trouble with the expression, of course, is that it is short for "gramophone"—an English, not an American, word. Since the American equivalent of "gramophone" is "phonograph," it seems only logical that an appropriate alternative name for the NARAS award would be "Phony."

Alston Chase
Powell, Ohio

Mozart's First Figaro

Congratulations on the wonderfully informative and wonderfully readable account of life at Esterháza (May) by H. C. Robbins Landon, my favorite musicologist and one of my favorite friends.

When Mr. Landon was in New York a few months ago, we spoke of the apparent inevitability of error in even the most conscientiously researched copy, of those "slips that pass in the night," of those gremlins mischiefously at work in the fertile no man's land between the brain and the finger at the typewriter. And I cited my own recent reference in these pages to "Massenet's Delilah" as an example.

It is, therefore, with all humility that I venture to correct his reference to Michael Benucci as "Mozart's first Figaro." Kelly sang the roles of Basilio and Curzio at the first production of The Marriage of Figaro, but the first Figaro was Francesco Benucci (1745-1824).

What a singer Benucci must have been at that time is suggested by Kelly's own account (in his Reminiscences) of the first full-orchestra rehearsal: "...Mozart was on the stage with his crimson pelisse and gold- laced cocked hat, giving the time of the music to the orchestra. Figaro's song, 'Non più andrai, fasilone amoroso!' Benucci gave with the greatest animation and power of voice. I was standing close to Mozart, who, sotto voce, was repeating, 'Bravo! Bravo! Benucci!' and when Benucci came to the fine passage, 'Che rubavo alla vittoria, alla gloria militare,' which he gave out with stentorian lungs, the effect was electricity itself, for the whole of the performers on the stage, and those in the orchestra, as if actuated by one feeling of delight, vociferated 'Bravo! Bravo! Maestro! Viva, viva, grande Mozart!'"

Benucci was also Mozart's first Guglielmo in Cav. fan tanie and the Leporello of the first Vienna Don Giovanni.

Henry Plasants
New York, N.Y.

The Electrical Era

I read with great pleasure the article "The Electrical Era: Recording's Lost Generation" by Ray Ellsworth in the May issue. Finally someone has had the gumption to speak out against the all-encompassing commercialization which has made collecting great performances on records all but impossible today. For, as Mr. Ellsworth most lucidly shows, it is not the means by which a great performance is preserved that matters; that the performance is preserved is paramount. Fortunately, however, a large number of shellac 78's were not carted off to the junk yard, and were preserved in attics and basement over the years. They are just now finding their way to collectors.

One small error in Mr. Ellsworth's article: in his discussion of Toscanini's 1936 recordings with the New York Philharmonic, he mentions Mozart's 'Haffner' Symphony and Dukas' Sorcerer's Apprentice. These two were in reality recorded in 1929. The 1936 Toscanini recordings included the Haydn Variations mentioned, along with Beethoven's Seventh Symphony, Rossini's Semiramide and L'Italiana in Algeri overtures, and an album of Wagner selections.

Nathan E. Brown
Los Osos, Calif.

Mr. Ellsworth replies: "I thought nothing, not mountains falling, not bombs raining, nothing could have shaken my conviction that the Toscanini recordings of 1936 were those I mentioned. Alas, memory failed. I stand corrected by the excellent Mr. Brown."

Tape: Speeds and Repertoire

I've just received my copy of the May issue, and I want to make two comments touching upon tape. First, I certainly agree with Robert McNell, who, in his letter to the editor, says that 3½ ips prerecorded tapes should not give way to ½ ips where music is concerned. Over the past six years, I've acquired over a hundred prerecorded tapes, and I feel I can second Mr. McNell from experience.

As for the other point, I look forward to (Continued on page 8)

PIONEER RECEIVERS will be here soon... they're worth waiting for!

* This is the identifying symbol of the Pioneer Electronic Corporation, recognized as a world leader in research and design of audio products.

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* A MARK TO REMEMBER

CIRCLE NO. 42 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"
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CIRCLE NO. 42 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"
SEE LAST PAGE.
if you’re going to tape, go Ampex!

new model #1160 with automatic threading, automatic reversing, solid state electronics and a price tag of only $449.95!

The professional heritage of Ampex tape recorders shows through unmistakably in this new portable. The smoothness of its dual capstan drive... the solid feel of its controls... the rugged die-cast aluminum construction... these are the things that assure you of years of trouble-free, satisfying tape recording and playback. See it soon, and its companion models: the #1150 deck-only and the #1165 in choice walnut cabinet. When you see your dealer for a demonstration, have him play it through the matching #1110 suitcase speakers; at $100 a pair, they’re nothing short of sensational.
Mattes Electronics Inc.
have designed the SSA/200
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We will shortly announce the performance, operation and
dimensions of a 200-watt amplifier with integral
preamplifier/control center. Occupying approximately the
same space in custom installations as a conventional
preamplifier alone, the SSA/200 will provide owners with a
number of conveniences not previously available. A new
array of digital controls, for example, will permit virtually
random access to nearly 315,000 combinations of level
and acoustic balance. Other characteristics of this
all-solid-state unit will be compatible in quality to
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world standard of high-power performance.
Your franchised Mattes dealer can arrange an early
demonstration of this remarkable new circuit.

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Circuitry / Chicago, Illinois 60639

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Some people
aren’t ready for
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in an up-to-date way.

We don’t expect everyone to fall in love with
a “round” speaker system. The Grenadier 8000P
is unique. ( Aren’t most new things?) We
didn’t design it to be different. We designed it
to be better. By creating a cylindrical shape we
were able to face the woofer downward close
to the reflecting floor surface. This provides
360 degree dispersion of the phenomenal stereo
sound and virtually lets you sit anywhere—
hear everything.

For them we dress
differently.

Our new 8400 convertible. Same great Grenadier
Sound. Same great technical features. We just
felt that for some people we better play it square.
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CIRCLE NO. 22 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.

and greatly co., w. Martin Booksan’s “Basic
Repertoire,” and I hardly feel qualified to
offer any corrections. But I do own the RCA
tape of the Reiner Rossini Overtures col-
lection (FTC 2021), and as recently as last
summer Ampex-London was offering the
Gamba performances (LON 8096), both of
which Mr. Booksan failed to consider in
his May column on Rossini overtures.

CHRISTOPHER R. MARE
State College, Pa.

Mr. Booksan replies: “Mr. Mare will note that I have corrected my oversight in
the concluding installment of my annual
‘Basic Repertoire’ updates, beginning on
page 42 of this issue.”

I am alarmed by the increasing number of releases of serious music in the 3 3/4-ips
tape format. It is disappointing to the tape
buff to consider such attractive items as Leit
Troyer, ’The Tales of Hoffmann,’ and Mah-
ler’s Ninth, and then to be obliged to reject
them because the sound of the tape issue is
unacceptable.

My tape deck cost five times the price of
the best turntables. Am I then to be content
to play on it tapes which are only ‘as good as’—or even ‘almost as good’—the origi-
nal record?

RAY YOUNGTON
Cedar Rapids, Ia.

I was interested in Martin Booksan’s
article in the March issue discussing the
‘battle of the tape speeds.’ I am not knowl-
edgeable enough to take issue with anything
he wrote, but I would like to give you the
views of a very critical listener: I am more
sensitive than most, I think, to distortion of
any sort, and particularly to even the slight-
est trace of distortion in pitch.

It has been my experience that 3 3/4-ips
tapes of vocal music are quite satisfactory in
every respect. I have popular and classical
music, operetta and opera, which I can en-
joy without any consciousness of compromise
in the sound quality. ( My equipment, by the
way, is an Ampex 2070 playing through
Dyna’s PAS-3 and two Mark III’s into a pair of
Leak Sandwich speakers.)

It has been my experience, however, that
when I have attempted to record some of my
record library, a selection such as Ormandy’s
recording of the Tchaikovsky Sixth Sym-
phony loses some of its transparency of sound
if recorded at 3 3/4 ips. And piano music is
almost invariably impossible to tolerate at
the slower speed.

BERGEN R. SUYDAM
Bethesda, Md.

Calendar of Classical Composers

I was much intrigued by your fine “Cal-
endar of Classical Composers” ( April ). Its
instructional value combined with its great
convenience make it most attractive. Such
devises as this calendar and the “Basic
Repertoire” are intelligent and effective uses
of the mass media for public education.

KEITH E. JONES
Cambridge, Mass.

Hz

Your articles on both music and audio are
all written by specialists, but they are always
couched in language that an interested lay-
man can understand. Therefore, I think it is

(Continued on page 10)
Imagine yourself at the podium, surrounded by a full symphony orchestra. Hearing everything. Missing nothing. Imagine that, and you will have begun to appreciate the exhilarating experience of the totally enveloping presence of the Sony 530's XL-4 Quadradial Sound System. This four-speaker system, two in the 530's case and two in its detachable split-lid, produces a virtual curtain of stereophonic sound. And only speakers this magnificent could complement a recording and playback instrument as superb as the Sony solid-state 530. Sensitive to virtually the entire audible range, the 530 captures exactly what it hears from 40 to 15,000 cps, and dramatically reproduces it with 20 watts of pure music power. Certainly a performance to please the audiophile. Yet the 530 achieves its remarkable performance with a simplicity that will delight the entire family. From Retractable Pinch Roller for almost automatic threading to Automatic Sentinel shut-off. Sony designed the 530 to make professional-quality tape recording and playback a marvelously uncomplicated pleasure. The 530's features include 4-track stereo or mono modes, three speeds, separate bass and treble controls, pause control and two famous F-96 dynamic mikes. Truly, the 530 is a complete stereo entertainment system for the home, any home. It's yours to enjoy for under $399.50.
I sound... the approach to quality

KENWOOD
TK-60 • AM/FM • 60 WATT SOLID STATE STEREO SILICON POWER • $239.95

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Featuring:

- 4 gang tuning condenser front-end for high sensitivity, image rejection and cross modulation ratio.
- 5 I.F. stages with exclusive automatic Gain Control Amplifier and wide band ratio detector for excellent selectivity and noise suppression.
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- Exclusive blow-out proof automatic circuit breaker protects power transistor.

Tuner Section:

- Four diodes special circuitry time division multiplex decoder for 38 db channel separation and 50 db subcarrier suppression.
- Automatic FM Stereo mono mode silent switching circuit with stereo light indicator.
- Illuminated pinpoint AM FM tuning meter.

Amplifier Section:

- 60 watt IHF standard total dynamic power.
- Very low IM distortion (no camel-back hump) — exceptional clear low level to high level listening.
- Wide 20 to 30,000 Hz power band width.
- Six program position source selector permits AM, FM-Mono, FM-Auto, PHONO, TAPE HD, AUX.
- Five position mode switch for LEFT, RIGHT, STEREO, STEREO REVERSE, MONO.
- A rocker switch VOLUME CONTROL for loudness contour.
- Bass and treble controls may be used to regulate each channel simultaneously.
- Front panel stereo phone jack.
- Center channel output for monaural amplifier and speaker.
- Direct tape monitor switch for tape monitoring without changing cable connection.

Price of $239.95 includes the handsome cabinet.
Visit your nearest KENWOOD franchised dealer, or write us for free, descriptive literature.

Kenwood

Music craze, even though I find much of this music unpleasant to listen to, but I don't think we ought to be tolerant of songs like Mainline Prosperity Blues. Isn't encouraging narcotics addiction as much against the law as burning draft cards?

Martha Attebury
Pearl River, N.Y.

With all the praise bestowed on your critics, I think it is about time someone gave Igor Kipnis the praise he so richly deserves. In my opinion he is not only the finest reviewer on your near-perfect staff, but also the finest anywhere. How many reviewers are musicians of the stature of Mr. Kipnis? I have heard two of his solo records and one in which he plays the continuo part, and I would be hard put to decide whether he is a better harpsichordist or reviewer. All his reviews are well written, show great perception and knowledge, and are always interesting. His reviews of Baroque music are usually minor masterpieces. I find that the best recordings of Baroque music in my collection are those purchased at Mr. Kipnis' recommendation. I have never once been disappointed by heedling his advice.

Kyle Renick
Kirkwood, Mo.

I find William Flanagan's reviews of modern music just and perceptive, I miss these virtues when he is considering Late Romantics such as Delius, Richard Strauss, and Rachmaninoff. Since he is admittedly unsympathetic to the Romantic gesture, he must be given these assignments so that he can vent his hostility feelings. His review of Sir Adrian Boult's Rachmaninoff Second Symphony (January) is a compound of Prussian theory, exhibitionistic prose, and vulgar wit, conveying an essentially false impression of the conductor's intent and achievement. Flanagan calls for a virtual Boulezification of the work, which would do violence to its soul-animated strains, the chordal demarcations that he regards with such facile scorn. Truly ridiculous is his assertion that there is a 'characteristically British' attitude to Rachmaninoff, one of mindless adoration. Perhaps he has seen Brief Encounter once too often on the telly. He certainly has not read British John Culshaw's sympathetic but trenchantly critical book on the composer.

David Wilson
Carmel-by-the-Sea, Calif.

Mr. Flanagan replies: "Mr. Wilson's description of my musical tastes is a distortion. Because I do not fancy all works by all late Romantics, it can scarcely be concluded that I am 'unsympathetic to the Romantic gesture...'. For example, I have great affection for the vocal music of Richard Strauss and the songs and later piano concertos of Rachmaninoff. As for my calling for a 'Boulezification' (whatever that may mean) of the Second Symphony—no, I was merely trying to suggest that the romanticism of this work is built into it, quite enough to permit the conductor's attention to the immediate problem of performing the piece cleanly and...truly. Rachmaninoff himself, morbidly aware of the shortcomings of his works, performed them straightforwardly and with no moment, at anyone who consults the com-

(Continued on page 14)
THE LOOK:  Inspired by 16th-Century Spain

THE SOUND:  Inspired by Altec's Famous "Voice of the Theatre" Speakers

Three speakers. Alike in beauty and dignity, differing in size. Their carved fretwork façades tell of a courtyard, ambuscados and Spanish blades. A fiery tale augmented in lustrous grain of hand-rubbed walnut.

Behind the fretwork, the same PLAYBACK speaker components that have made Altec the standard of the nation's broadcast and recording studios for 35 years.

How large a speaker system will fit the décor of your home? Whichever of these new Altec Full-Size speaker systems you choose, you'll enjoy a big measure of beauty with a full measure of sound.

A7-500W-1 Magnificent ...ONLY ITS NAME COULD DESCRIBE IT! In all the world, the new Magnificent is the most beautiful speaker ever built. In sound, in looks. Same components, same cubic volume as the famous A7-500 "Voice of the Theatre"®, the PLAYBACK speaker system whose massive perfection thunders and whispers in recording studios throughout the nation. A sound matched only by the new Magnificent. Size: 44 H" x 32 W" x 25 D". $498.

846A VALENCIA PLAYBACK SPEAKER SYSTEM • Same components as famous A-7 "Voice of the Theatre"® system. Size: 29½" H x 27½" W x 19" D. $333.

847A SEVILLE FULL-SIZE SPEAKER SYSTEM • Combines exceptional performance and space-saving cabinet. Size: 26" H x 19" W x 14" D. $231.

See the glory of Spain, hear the glory of the world's finest speaker systems! Your Altec dealer is waiting to let you make your own test: A-B Full-Size Altec speakers against any others. You'll hear right away that bookshelves are for holding books, Full-Size speaker systems for making music! These Altec systems will accommodate any room requirement, from the grand hall of a mansion to the limited space of an apartment. Dept. SR7

Guaranteed to reproduce any program material recorded on tape and records, or broadcast on FM.

846A VALENCIA PLAYBACK SPEAKER SYSTEM  •  Same components as famous A-7 "Voice of the Theatre"® system. Size: 29½" H x 27½" W x 19" D. $333.

847A SEVILLE FULL-SIZE SPEAKER SYSTEM • Combines exceptional performance and space-saving cabinet. Size: 26" H x 19" W x 14" D. $231.

See the glory of Spain, hear the glory of the world's finest speaker systems! Your Altec dealer is waiting to let you make your own test: A-B Full-Size Altec speakers against any others. You'll hear right away that bookshelves are for holding books, Full-Size speaker systems for making music! These Altec systems will accommodate any room requirement, from the grand hall of a mansion to the limited space of an apartment. Dept. SR7

Guaranteed to reproduce any program material recorded on tape and records, or broadcast on FM.

ALTEC LANSING
A Division of Sevco, Inc.
ANAHEIM, CALIFORNIA

CIRCLE NO. 2 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
NEW...Concertone 800 Series

WITH "3 PLUS 3" REVERSE-O-MATIC®

New from Concertone—a complete line of professional bi-directional stereo recorders, featuring totally automatic "3 Plus 3" Reverse-o-matic®.

- Two separate three-head systems provide erase, record, play, and off-the-tape monitoring in both directions.
- Fool-proof reverse programming...reverses precisely where you want it...when you want it.
- Assures uncompromised stereo balance, levels and response, distortion, and signal-to-noise ratio in play and record modes in both directions automatically.

PLUS Self-adjusting Band Brakes • Dual Automatic Shut-off and Tension Arms • Record Level Pre-Set • Add-Echo • Multiple Sound-On-Sound • and many other outstanding functional features.

Model 804 Professional Tape Deck — heart of the new 800 series — available for less than $400.

Model 802 Professional Portable — completely self-contained, with stereo monitor amplifier and speaker system, less than $470.

Model 815 Real Wood Designer Portable — with built-in powerful Norton Amplifier; including separate speaker system, less than $700.

Model 814, The Audio Composium — a complete stereo home entertainment center, with AM/FM multiplex Norton receiver, record changer; available in four distinctive cabinet styles, less than $950.

Norton Amplifier — less than $150.

Write today for complete details on the new Concertone 800 series.

CONCERTONE
A DIVISION OF ASTRO-SCIENCE CORPORATION
9731 Factorial Way • South El Monte, California 91733

CIRCLE NO. 13 ON READER SERVICE CARD

(Continued on page 16)
The match.

In high fidelity, as in life, some things are meant to be. And Fisher meant the TFM-200 to be the mate of the TX-200.

In every way.
Appearance matches appearance: trim matches trim, knob matches knob, style matches style.
And performance matches performance. So that good music remains good.
The TX-200 is a 90-watt solid-state stereo amplifier plus a complete stereo control center. A fine match for any tuner.
The TFM-200 is a solid-state FM-stereo tuner with automatic mono-stereo switching and the Fisher Navistor-GOLDEN SYNCHRODE front end. Very sensitive.

Together, the TX-200 and TFM-200 can do anything in stereo. Receive even the most difficult FM-stereo broadcasts and reproduce the richest musical offering. Beautifully. Reliably.
The modest cost of both units makes them a matchless value: $299.50* for the TFM-200 and $279.50* for the TX-200.

Of course if you already have a tuner or amplifier, don't hesitate to propose a match of your own. Any Fisher dealer will help with the wedding arrangements. The Fisher
For more information use coupon on page 20.

**Beware of Pickpockets**

Slim, light . . . pocketable . . . perhaps too enticing. That’s the only problem with the new Fujica instant load movie camera. No other problems though . . . and its wonderfully easy to use.


Your First Movies Are On Us! Free Film & Processing!

For a limited time only, your Fujica dealer has a special price, introductory offer that includes the Fujica Single-8 camera of your choice, zip pouch case, wrist strap, batteries, plus free film and free processing!

**FUJICA Instant Load Single-8 Movie Cameras**

for sharper color movies simple as snapshots

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**Judy**

- Re the review of Judy and Liza at the London Palladium (November): doesn’t anyone remember Dorothy, the sweet young girl who travelled the yellow brick road many moons ago? This Gene Lees, I’m afraid, doesn’t even know who the little girl was and is!

Judy Garland is many things to many people, but she is still and will always be Dorothy of The Wizard of Oz—and Miss Show Business—to me.

Gwen Gordon
Toronto, Canada

For Ms. Lees’ opinions of Judy Garland as Dorothy in The Wizard of Oz, see his review on page 94.

- When I read Gene Lees’ review of Judy Garland’s recording at the London Palladium, I felt as if I was being personally offended. But what Gene Lees said was true. When I listen to the fabulous “Judy at Carnegie Hall,” I am thrilled through and through by her tremendous performance. She is electrifying. The audience response is overwhelming. They all love her. Now, when I hear Judy’s singing on the London Palladium recording, I get depressed. Her vibrant and forceful voice falters on long notes. Many of her words are slurred. But her performance is still exciting. And the audience still loves her, perhaps even more today than they did before.

I am eighteen. I have admired Judy Garland since I was thirteen, when I received her Carnegie Hall album as a gift. I hope this letter lets Judy Garland know that she is still loved and admired by millions of people and always will be.

Robert Steinman
Randallstown, Md.

**Unwanted Guest, Unheard Air**

- Re G. C. Ramsey’s “Organ Music of the Romantic Period” (March), when the author came to the disc entitled “Recital at Westminster Abbey,” he must have either slept or slipped. I have the record; the organist is Douglas, not George, Guest, and no Wesley Prelude, Air, and Gavotte is to be heard on it.

Roy C. Cornish
Trenton, Ont., Canada

Mr. Ramsey replies: “Mea culpa! I am afraid that I confused the Christian names of the two guests. And Mr. Cornish is indeed right too that the record in question does not contain the Wesley piece, which is on a York Minster record, and number two of the Great Cathedral Organ series.”

**THIS MONTH’S COVER**

As our cover suggests, stereo cartridges these days can come in a bewildering variety of sizes, shapes, colors—and technical specifications. But regardless of individual conformations, they all present their manufacturers with many of the same problems, which are discussed this month by a panel of experts in the article beginning on page 45 of this issue.

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**CIRCLE NO. 28 ON READER SERVICE CARD**

FOR STORES “WHERE YOU CAN BUY”—SEE LAST PAGE.
The marriage.

At Fisher, components that go together can get married. And often do.
That's how Fisher receivers came to be.
Of course, the marriage of a sensitive tuner and a rugged, powerful amplifier has to be rather carefully arranged. They're going to be together a long time. In one cabinet.
The Fisher 440-T is a recent example.
Starting with a solid-state amplifier muscular enough (70 watts!) to handle the toughest music, Fisher engineers selected a solid-state FM-stereo tuner sensitive enough (2 uv IHF) to capture any available broadcast. Then they designed a chassis with all the modern conveniences: automatic mono-stereo switching and illuminated d'Arsonval tuning meter for FM; front-panel headphone jack, front-panel selector for main or remote speaker systems, and a complete control center. All the electronics needed for a long, happy life together. For you.
But modest in cost. $329.50.*
Ask any Fisher dealer. He'll be delighted to introduce you to our married components. The Fisher
For more information use coupon on page 20.
The IMF Mark 4 Cartridge with the patented "direct coupled" elliptical stylus.

The electrical signal is generated directly at the stylus tip by an exclusive, precise system of lateral and vertical coils. Eliminates all the problems of cantilever drive cartridges (extra cantilever and damper mass, transmission loss, resonances, rubber hinges).

The Mark 4 produces a cleaner, more transparent sound image from any record. The "attack" sounds of music are heard in all their natural clarity. "Record distortion" and wear are dramatically reduced.

Available only from franchised dealers. A detailed explanation of the superb Mark 4 is available on request, Dept. S. Also available for the asking — Newsletter 6, “New Adventures in Disc Reproduction”

**IMF PRODUCTS**

7616 City Line Ave.
Phil., Pa. 19151

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**Phono-Cartridge Deterioration**

**Q.** How often should the phono cartridge in a hi-fi system be changed? Also, what happens to a cartridge that causes it to deteriorate?

**R. LEVENE**

Brooklyn, N.Y.

**A.** It has been my experience that the major reason for changing a cartridge is the fact that it has become technically obsolete. Phono-cartridge design has gone ahead so rapidly in the past four or five years that older cartridges simply cannot compete, sound-wise, with the newer models. If you are in doubt as to whether your particular hi-fi cartridge has been made obsolete by newer models, check with its manufacturer. If a cartridge is still in a manufacturer's line, it is a pretty good indication that it is successfully competing with the newer models.

As for what makes a cartridge's sound deteriorate, that depends on the physical design of the particular cartridge. A number of cartridges use plastic or rubber damping or pivot assemblies that in time tend to change their characteristics and therefore change the sound of the cartridge. It is also conceivable that the stylus assembly or diamond stylus itself is damaged in some way, but that can be checked easily by inspection.

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**12-Volt Tape Recorder**

**Q.** I am interested in purchasing a tape recorder that will operate on a 117-volt line current and also on 12-volt d.c. (an automobile battery). A further requirement is that it be able to take 7-inch reels. I have not been able to locate such a recorder in the catalogs and wonder if such a unit is available.

**Joe H. McCullough**

Raford, Fla.

**A.** I am not aware of any tape recorder that will operate on 12 volts d.c. and also take seven-inch reels. Your best bet is probably to buy a standard seven-inch reel a.c. recorder and an inverter (preferably transistorized) that will convert your car's 12-volt d.c. battery voltage to 117-volt, 60-cycle a.c. to operate your tape recorder. A number of these units are available—they will provide about 125 watts of a.c. power and cost about $30. You should be aware that not all of the d.c.-to-a.c. inverters have the frequency stability or low-noise characteristic required for operating a tape recorder, so check that point before purchase.

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**Low-Level Transistor Noise**

**Q.** I recently bought a highly-rated transistor amplifier and found that it is somewhat too noisy for the use to which I put it. I do a lot of late-night listening to string quartets at very low levels. One channel of the transistor amplifier has a slight hissing and buzzing quality which at normal listening level is not audible but is quite annoying at low volume. I had the amplifier checked by the factory, and I was told it was within specifications and that the noise problem results from my speakers. It is true that I'm temporarily using two under-$20 coaxial speakers in home-made boxes, and I intend to replace them with better units later, but I do not see how they can be causing the problem. What is your feeling on the matter?

**David Licht**

New York, N.Y.

**A.** It is generally true that the smoother the high-frequency and mid-range response of a speaker system, the less obtrusive various kinds of noise will be. Also, inexpensive speakers usually have a large, broad, mid-range peak designed into them to provide a greater loudness for a given input. These two factors combine to make the transistor noise disturbing at very low levels, which it would not be with either a less efficient system, a smoother system, or a system with a non-peaked mid-range. If you don't intend to replace your speakers immediately, you might try installing a 10-ohm, 2-watt resistor in series with each speaker using the switching arrangement shown above. At low levels, this would probably result in a better signal-to-noise ratio at the speakers, and as a side effect it may give you a little more (Continued on page 20)
Put a Fisher engineer and a tough problem together and the result is almost inevitable.
The shrimp is the most recent proof of this.
Little speakers are not new. A good little speaker is. Popular opinion to the contrary, it is far more difficult to make a good speaker in a small package than in a large one.
Consider the problems. First, just managing to fit all the speakers and coils and sound absorbent material in a little box is an enormous problem. Especially if you want to be able to reproduce bass. The smaller the bass speaker, the smaller the amount of bass produced. Also, the smaller the box, the smaller the bass potential.
There are exceptions to the above 'rules', but they are exceedingly difficult to achieve. And very very expensive.
That's why the shrimp is so remarkable.
In an incredibly tiny box, Fisher engineers have incorporated a 6-in. bass speaker with a 2-lb. magnet structure and a free-air resonance of 35 cps, a 2½-inch treble speaker with a unique plasticized surround and an R-C crossover network.
The Fisher XP-33 is small in price as well as size. Only $49.50. Great values like this are to be expected from Fisher. For music lovers with more room, larger Fisher speaker systems are available for even finer performance.
Model SPUT or Model SPEIGT Universal

Model SPEI or Model SPEIGT Elliptical

Model SPUIT or Model SPUGT Universal $50

Specifications
Frequency Response: 20-30,000 cps
"Deca Spectrum" Channel Separation: 20-25 db
Impedance: 50,000 ohms
Stylus Pressure: 1.2 grams recommended
Equivalent Mass at Stylus Point: 1 milligram

Ortofon, master cartridge maker of the world, was the first to develop and mass produce the remarkable elliptical stylus, a feat so advanced that it opened a new era in sound reproduction. The elliptical stylus eliminates "pinch effect" and other causes of sound distortion, creating music more faithful to the original than any other stylus yet developed. Model SPE/GT is mounted, for all Ortofon tone arms. Model SPUT is unmounted, for use in other universal tone arms. Ortofon continues to lead the world in cartridge, stylus and tone arm advances.

A MUST FOR RECORD LOVERS!
HOW TO CLEAN, MAINTAIN and PROTECT YOUR RECORDS by Cecil E. Watts. only 25c
Send 25c for Watts Booklet and FREE descriptive Booklet on the Ortofon Elliptical Styl.
You’ve got the whole world in your hands.

Our world is ever shrinking. And growing. We can go to almost any part of the world in hours. It used to take days, or weeks. Or we can bring the world to us. Instantly. With a Fisher R-200-B.

But the shrinking of the world has caused it to expand. Now a concert broadcast in London, Paris, Moscow or Tokyo is as much available as one broadcast locally. And a news event in Saigon, Moscow or Beirut can be caught as it happens. With the world in turmoil, as it is, news is increasingly important. Before it gets digested, analyzed and parboiled for television or newspaper presentation.

We don’t mean to intimate the R-200-B is a magic box which will automatically bring in all these programs. There are atmospheric limitations to any multiband tuner. But the R-200-B is the first multiband tuner built to high fidelity standards. With its three AM bands it can receive long-wave, medium-wave and short-wave broadcasts. Wide-band for full concert fidelity, regular bandwidth for normal broadcasts, narrow-band to eliminate interference.

It also includes an FM-stereo tuner with automatic mono-stereo switching and the famous Fisher STEREO BEACON* multiplex decoder.

Behind the Nuvisor front end, the R-200-B is completely solid state. And completely reliable. Because Fisher is the largest and most experienced manufacturer of high fidelity components.

For only $349.50, you can have the whole world in your hands.

*Patent Pending

For more information use coupon on page 20.


JULY 1966

CIRCLE NO. 24 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY" — SEE LAST PAGE.
James B. Lansing has designed two new loudspeaker systems for outdoor use called the Carnival and the Festival. Both are easily portable and can be used indoors or outdoors as desired. All components of both systems are weather-resistant and will withstand direct splashing or spraying without damage. The Carnival enclosure houses a JBL D280 8-inch extended-range loudspeaker with 2-inch edge-wound aluminum voice coil and water-resistant cone. A 2-inch aluminum center dome extends the high-frequency range. The Festival uses an even more massive loudspeaker, the JBL LE8T, to give smooth response through the full audible frequency range plus extremely wide dynamic range. Both models use the JBL passive radiator which enhances the bass performance and dynamic range. The units can easily be adjusted to project sound in any direction desired and can be suspended from ceilings or eaves in permanent installations. Both units measure 22 inches in width. Price of the JBL Carnival is $105 and that of the Festival is $135.

Circle 176 on reader service card

Lafayette's integrated solid-state amplifier, the LRE-80, is rated at 40 watts music power per channel. Five pairs of stereo inputs accommodate a tuner, a magnetic or ceramic phonograph cartridge, a tape recorder, and auxiliary sources. Also included are front-panel stereo headphone jacks and a speaker-phase and on-off switch. Frequency response is 22 to 21,000 Hz ±1 dB, and harmonic distortion is less than 1 per cent. Rocker switches control the rumble filter, scratch filter, loudness compensation, and tape-monitor function. In addition, a fifth switch selects either a magnetic-phonon or tape-head input. The amplifier's size is 13 x 4½ x 10½ inches. Price, with cabinet: $119.95.

Circle 177 on reader service card

Roberts has introduced an eight-track stereo tape cartridge playback unit for the home. Housed in a walnut cabinet, the device is intended to plug into any existing high-fidelity component, console system, or home phonograph. Compact and lightweight, this home cartridge machine was designed to play Lear Jet auto stereo eight-track cartridges. Features include manual and remote-control program track selection and high- and low-level preamplifier outputs which make it possible to play the unit through any phonograph system or amplifier. Price: $99.95.

Circle 178 on reader service card

Sherwood's Model S-8800 all-silicon transistor stereo FM receiver is rated at 130 watts music power at 4 ohms and 100 watts at 8 ohms. It incorporates the same stereo FM tuner circuits used in Sherwood's S-3300 and has an FM sensitivity of 1.6 microvolts (1HF). A specially designed dual automatic-gain control system maintains proper selectivity under the strongest signal conditions. The Model S-8800 features automatic noise-gated FM stereo/mono switching; a stereo indicator light; a zero-center tuning meter; a front-panel stereo-headphone jack; and rocker switches for selection of the tape-monitor, noise-filter, loudness-contour, and speaker-switching functions. Front-panel controls also permit adjustment of interstation muting and phono-preamplifier gain. Other specifications include an IM distortion of 0.1 per cent at 10 watts or less. The power bandwidth at 1 per cent distortion is 12 to 35,000 Hz. Sensitivity at the auxiliary input is 0.2 volt, at the phono input 1.6 millivolts, and at the tape-head input 1.2 millivolts. The maximum hum and noise (below rated output) is −75 db at the high-level inputs and −63 db at the magnetic-phono input. FM signal-to-noise ratio is 70 db, capture ratio is 2.2 db, and FM distortion is 0.3 per cent at 100 per cent modulation. The S-8800 carries a three-year parts and labor warranty. Chassis size is 16½ x 11½ x 1½ inches. Price: $359.50 for the custom-mount chassis; $568.50 in walnut-grained leatherette-covered cabinet.

Circle 182 on reader service card

Benjamin has introduced its new top-of-the-line automatic turntable/changer model PW-50H. The four-speed (78, 45, 33⅓, and 16 rpm) player incorporates the standard Miracord Papst hysteresis motor and pushbutton system. Among the new features are: stylus-position adjustment gauge for optimum tracking, completely independent cueing mechanism, cross-bar arm lock, hairline arm balancing, an anti-skating provision, an illuminated speed indicator, and calibrated stylus-force dial. The tone arm will function at under 0.5 gram. The Miracord PW-50H is priced at $149.50 (less base and cartridge).

Circle 185 on reader service card

Dynaco has introduced the Stereo 120, a 60-watt-per-channel solid-state power amplifier. The Stereo 120 has all the audio attributes of Dynaco's older mono tube amplifier, the Mark III, plus the compact design and cool operation made possible by transistorization. The Stereo 120 (Continued on page 24)
Good records start with Stanton.

A professional needs to know for sure. When he listens to a test pressing, he needs a cartridge that will reproduce exactly what has been cut into the grooves. No more, no less. Otherwise he would never be able to control the final product. The record you buy in the store.

That's why the professionals keep using Stanton. It tells them the whole truth, and nothing but.

In the photograph above, studio engineers are shown listening to a test pressing. This is a critical stage in record making. The stereo playback system they are listening through is fronted by a Stanton 581 EL Calibration Standard. (The turntable also happens to be a Stanton. Other fine turntables will work, too.) They're getting the whole message. You'll get it, too, in an upcoming release.

Each Stanton Micro FLUX-VALVE® Calibration Standard is custom made. That means that each will perform exactly as the original laboratory prototype. We laboriously adjust them until they do. It also means that you will get the same accuracy that the professionals get. Guaranteed.

Stanton Calibration Standards are hard to make. And the price reflects it. $49.50. But that really isn't much to pay for uncompromising accuracy.

Stanton Magnetics, Inc. Plainview, L. I., N. Y.
is electronically protected against output transistor failure by the inherent current-limiting of Dyna's biasing circuit, which permits operation into shorted, open, or heavily loaded circuits without damage or strain. If the output is shorted, the Stereo 120 will shut itself off and restore the sound instantaneously when the load is lightened. The amplifier requires no adjustment of any kind, either after completion of the kit or after servicing. The bias is automatically set, and all components are operated well within ratings. The power rating of the Stereo 120 is based on rms continuous-power handling from 20 to 20,000 Hz. Output with a 16-ohm speaker is 36 watts. With 4- and 8-ohm speakers, the full 60 watts is available. The Stereo 120 handles all conventional loudspeakers, including electrostatic types, and is unconditionally stable with all loads. The IHF power bandwidth rating is 5 to 50,000 Hz at less than 0.5 per cent total harmonic distortion. Harmonic distortion is less than 0.25 per cent at any power level up to 60 watts, at any frequency between 20 and 20,000 Hz. Intermodulation distortion is less than 0.5 per cent at any power level up to 60 watts, with any combination of test frequencies. The noise level is 95 db below rated output, and separation is in excess of 70 db from 20 to 20,000 Hz. Input impedance is 100,000 ohms, and 1.3 volts of drive signal is required from the preamplifier for 60 watts output. Size is 13 x 10½ x 4 inches, and weight is 20 lbs. Price: $159.95 kit, $199.95 assembled.

8-ohm speakers, the full 60 watts is available. The Stereo 120 handles all conventional loudspeakers, including electrostatic types, and is unconditionally stable with all loads. The IHF power bandwidth rating is 5 to 50,000 Hz at less than 0.5 per cent total harmonic distortion. Harmonic distortion is less than 0.25 per cent at any power level up to 60 watts, at any frequency between 20 and 20,000 Hz. Intermodulation distortion is less than 0.5 per cent at any power level up to 60 watts, with any combination of test frequencies. The noise level is 95 db below rated output, and separation is in excess of 70 db from 20 to 20,000 Hz. Input impedance is 100,000 ohms, and 1.3 volts of drive signal is required from the preamplifier for 60 watts output. Size is 13 x 10½ x 4 inches, and weight is 20 lbs. Price: $159.95 kit, $199.95 assembled.

**Switchcraft** has introduced two miniature high-gain audio preamplifiers with self-contained battery supplies. Called Mix-Amps, these transistorized devices provide uniform gain across the audio-frequency range, and are said to be particularly suited for increasing output of low-level microphones and reducing high-frequency loss in long lengths of microphone cable. These devices are also valuable for impedance matching and fixed-gain applications and, particularly, for boosting low-level outputs of attenuating networks and pads. Both Mix-Amps, Model 503 and 501, have a uniform response of ±1 db from 20 to 20,000 Hz. An impedance switch allows selection of low-impedance output (2,000 ohms) with 25 db gain and a high-impedance output (35,000 ohms) with 6 db of gain. The units have separate on-off switches and a standard "AA" Penlite cell provides up to 1,000 hours of operating time. The Model 503 Mix-Amp accepts a standard ⅜-inch phone plug, and the amplified output is available at a miniature phone plug. The 503 comes with an adapter to convert the miniature plug to a standard-size phone plug. The metal preamp housing is finished in a metallic tan color, and provides complete electrical shielding for all internal circuits. The Model 501 has the same design features except that the output plug is a long-shouldered standard phone plug, which may be used with normal jacks and also for equipment using recessed jacks. List price of the Model 503 is $16.50; of the Model 504, $14.50.

**Circle 185 on reader service card**

**Craig** is marketing the Vista 910, a solid-state, four-track stereo tape recorder. The 910 has a single T-level control for the transport mechanism and operates at 7⅛ or 3⅓ ips. A built-in stereo amplifier drives a pair of 4 x 6-inch speakers built into the sides of the case. The single VU meter can be switched to read either channel. There are inputs for high- and low-level sources and outputs for external speakers or stereo headphones. Frequency response is 50 to 15,000 Hz at 7⅛ ips. Accessories include two microphones, two patchcords and reels. Price: $179.95.

**Circle 186 on reader service card**

**Ampex** has added four new speaker systems to the several models previously available. Compatible with any high-fidelity system, they are all full-range, multiple-speaker systems with woofers, mid-range units, and tweeters in various combinations. The four additions to the line are the Model 915, the 1115, the 2115, and the 4101.

The Model 915 has an 8-inch woofer and a 3½-inch tweeter with rear-panel control. Frequency response is 50 to 15,000 Hz. Dimensions of the oiled walnut cabinet are 18 x 13½ x 9½ inches. Impedance is 8 to 16 ohms, maximum power capacity 15 watts. List price: $158 a pair.

The Model 1115 includes a 10-inch woofer, two 3½-inch mid-range units, and a tweeter with rear-panel control. The crossover frequencies are 2,000 and 10,000 Hz, and the frequency response is 25 to 20,000 Hz. Dimensions of the oiled walnut cabinet are 23¾ x 13¾ x 13½ inches. Impedance is 8 to 16 ohms, maximum power capacity 25 watts. List price: $210 a pair.

The Model 2115 includes a 12-inch woofer and two 3-inch mid-treble units. Frequency response is 30 to 20,000 Hz. The crossover network operates at 1,800 and 5,000 Hz. Dimensions of the oiled walnut cabinet are 24 x 14 x 12 inches. Impedance is 8 to 16 ohms, maximum power capacity 30 watts. List price: $280 a pair.

The top-of-the-line Model 4010 has a 12-inch woofer, two 3-inch mid-treble units, and a tweeter. The system has a bass response extending down to 30 Hz at a distortion of less than 3 per cent. High-frequency response extends to beyond audibility. The three-way L-C crossover is at 1,800 and 8,000 Hz. There are two rear-panel, continuously variable controls for mid- and treble ranges. The dimensions of the oiled walnut cabinet are 21 x 14 x 12 inches. Impedance is 8 to 16 ohms, and the maximum power-handling capacity is 75 watts. List price: $420 a pair.

**Circle 187 on reader service card**
there is no margin for error when striving for the ultimate in stereo sound re-creation

incomparable Stereo Dynetic®... by SHURE

Tiny though it is, the cartridge can make or break a stereo system. For this breath-takingly precise miniaturized electric generator (that's really what it is) carries the full burden of translating the miles-long undulating stereo record groove into usable electrical impulses... without adding or subtracting a whit from what the recording engineer created. Knowing this keeps Shure quality standards inflexible.

Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Ill. 60204 the premier family of stereo sound reproducers

M55E
15' tracking, elliptical stylus, 3/4 to 1/2 grain tracking. Professional performance—and a very special value at $35.50.

M80E
Bounce-proof, scratch-proof performance for Garrard Lab 80 and Model A70. $38.00.

M44-7
Economical trend-setter. 15' tracking. Low IM and harmonic distortion. 110-3 gm. tracking. $19.95.

M3D
Extremely musical. Tracks at pressure to 6 gms., fits any changer. Only $15.75.

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"The best pick-up arm in the world." Provides features and quality unattainable in any other tone arm. $100.50. (For 12" records.)

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CIRCLE NO. 59 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.

JULY 1966
AUDIO HEALTH PLAN CONTINUED

Preventive medicine for your audio equipment should include periodic checkups of your tuner and tape recorder, for the performance of these components is likely to degenerate if their maintenance is neglected. With prolonged use, a tuner's innards may get slightly out of adjustment, resulting in annoying symptoms: the tuning indicator no longer shows the optimum position for a given station, background noise becomes obtrusive, high notes or loud passages distort, and stereo separation practically vanishes.

Basically, alignment involves adjusting a number of tuned circuits to specific frequencies. New tuners are aligned at the factory, but sometimes rough handling in shipment or extremes of temperature may slightly alter these precision adjustments. Occasionally, therefore, even a new tuner needs touch-up alignment; however, improved mechanical design of the coils has made such initial defects quite rare. Modern tuners also hold up better. Since their solid-state circuits are subjected to less heat, they maintain the initial alignment far longer than tube tuners.

Still, to keep your tuner working at its best, it is a good idea to have its alignment checked about every eighteen months or two years—or more often if it is a tube unit. Alignment is a tricky job, though, and it should never be entrusted to technicians of questionable competence. A factory-authorized service dealer is your best bet.

Your tape recorder, however, usually needs only proper home care. Rule Number One: keep the heads clean. Some of the brown oxide dust that constitutes the magnetic coating of the tape invariably rubs off as the tape glides past the recorder's heads. After some ten hours of recording or playing, enough oxide dust has usually accumulated on the narrow gap of the recording and playback heads to cause fuzziness and loss of highs. To clean the heads, simply rub the head surfaces very lightly with a cotton swab moistened with tape-head cleaning fluid obtainable at most audio dealers. While you're at it, also clean the oxide dust from around the brackets and rollers that guide the tape past the head.

Rule Number Two: demagnetize tape heads at least once a month. In prolonged use, the heads of your recorder become slightly magnetized, which causes a dull hissy quality. To cure it, invest about $5 in a head demagnetizer, and follow the instructions that come with it.

Since most recent tape recorders have permanently lubricated motors and bearings, cleaning and demagnetizing the heads is about all the routine maintenance they need. But just to be on the safe side, check your instruction book to be sure that your recorder is a self-lubricating model. If in playing prerecorded tapes your machine shows persistent loss of highs that cannot be remedied by demagnetizing the heads, it may be that the heads have shifted their position with respect to the tape path and will have to be mechanically realigned by a serviceman.

To conclude these hi-fi health tips, here's the audio equivalent of aspirin: make sure all plugs are firmly seated in their jacks and all screw-type wire connections are tight and not shorting out to adjacent terminals. This simple step brings relief from many audio headaches.

Freshly prepared for readers of this column is a handy, informative, twelve-page booklet, A Basic Audio Vocabulary. To get your free copy, simply circle number 181 on the Reader Service Card on page 25.

T H E  n a m e  f o r  f i n e r  q u a l i t y  a n d  m u l t i - b a n d  p o r t a b l e  r a d i o s  . . .

i n  p e r s o n a l  p o r t a b l e s  . . .

p l u s  t h e  a l l - p u r p o s e  p o r t a b l e s

T e l e f u n k e n  S a l e s  &  S e r v i c e  H e a d q u a r t e r s  f o r  o v e r  a  d e c a d e

C I R C L E  N O .  3  O N  R E A D E R  S E R V I C E  C A R D

D y n a m i c  s o u n d  o n  A M / F M ,  c a r  r a d i o  w i t h  u n d e r d a s h  b r a c k e t  a v a i l a b l e .

B a j a z z o  S p o r t  i s  y o u r  9  t r a n s i s t o r  T e l e f u n k e n

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CIRCLE NO. 3 ON READER SERVICE CARD

28

HIFI/STereo REVIEW
July 1966

Scott engineers are constantly on the search for new developments to continually improve a near-perfect product.

After experiencing the miraculous improvements FET's brought to FM, Scott engineers applied amazing new FET circuitry to Wide-Range AM. The result — the new 382 AM/FM stereo receiver — incorporating, for the first time anywhere, a Field Effect Transistor AM circuit along with Scott's astonishing FET FM front end. Introduction of this new model marks the first real improvement in AM circuitry design in more than a decade.

**AM Comes of Age**

Recent improvements in AM broadcasting equipment, plus the Federal Communication Commission's decision to split AM and FM programming, have given audiophiles renewed interest in superior AM reception. Introduction of the new 382 now brings Scott FET sound to the exciting news, sports, current events and music broadcasts available only on the AM band.

Scott AM Has Advanced FET Circuits

Advanced Scott 382 circuitry incorporates Automatic Variable Bandwidth, a unique feature which automatically adjusts tuner bandwidth to the quality of the incoming signal. The bandwidth automatically narrows for best reception of weak, distant stations, blocking out noise and interference. When tuned to stronger stations, the bandwidth automatically broadens, providing full frequency wide-range reception. In addition, the new Scott Automatic Gain Control circuit, which increases tuner sensitivity when incoming signal decreases, also increases resistance to cross modulation as the signal gets stronger.

**Field Effect Transistor FM Lets You Hear More Stations, More Clearly**

The 382 utilizes revolutionary new Field Effect Transistor circuitry for maximum FM sensitivity with virtually no cross modulation, no drift, no more problems caused by changing tube characteristics. Scott is the first, and only, manufacturer to use this important advance in solid-state design.

Scott's all silicon IF strip provides three stages of true IF amplification for strong as well as weak signals plus three additional stages of IF limiting action, giving optimum selectivity and stereo separation.

**Direct-Coupled Silicon Output Amplifier Section**

Output and driver transformers, major causes of diminished power and distortion, are eliminated from Scott's radically new direct-coupled solid-state amplifier design, allowing more power over a wider frequency range, with virtually no distortion.

The 382 includes these popular features found in the most expensive Scott components: Tape Monitor switching, Speaker switching with provision for remote speaker selection, switched front panel stereo headphone output, front panel stereo balance switch, separate-channel clutched bass, treble, and volume controls, fully automatic stereo switching with indicator, and precision tuning meter.

**382 Specifications:**

- Usable sensitivity, 2.5 av
- Harmonic distortion, 0.8% (Drift, 0.002%)
- Frequency response, 18-25,000 cps +1 db
- Music Power rating per channel (4 ohms), 32 W watts
- Cross Modulation Rejection, 85 db
- Stereo separation, 35 db
- Capture ratio, 6.0 db
- Selectivity, 40 db
- Price $339.95

For complete information and specifications, circle Reader Service Number 100.


Prices and specifications subject to change without notice. Prices slightly higher west of Rockies.

New Scott 382 Receiver lets you hear more stations, more clearly!

65-watts/Space-age FET circuits in both AM and FM/Only $339.95

Space-age Scott FET design improves AM as dramatically as it does FM
How long will Beethoven be around?

A real long time — on pre-recorded tapes with a base of MYLAR*. Like blank tapes on a base of MYLAR, they contain no plasticizer, so they can't dry out or become brittle with age. They can be stored anywhere — indefinitely. That's why MYLAR is the base used for "play-in-car" hi-fi tapes.

Pre-recorded tapes represent an investment. Why not invest a little more for MYLAR and have the added insurance and protection of the strongest, longest-lasting tape base you can buy?

Make sure your favorite pre-recorded tapes are on a base of MYLAR polyester film. And look for the label on the box that says MYLAR.

How long will pre-recorded tapes of MYLAR last? Well, how long has Beethoven been around?

*Du Pont's registered trademark for its polyester film

Better Things for Better Living ... through Chemistry
TECHNICAL TALK

By JULIAN D. HIRSCH

• TESTING STEREO COMPACTS: As regular readers of this magazine know, there is an unmistakable trend toward complete, packaged music systems supplied by established high-fidelity component manufacturers. This is a logical extension of the universal acceptance of the integrated receiver over the past several years.

Except for the dyed-in-the-wool audio hobbyist, who will not tolerate any compromise (real or imagined) resulting from combining a tuner, preamplifier, and amplifier on a single chassis, most music lovers find all-in-one receivers perfectly satisfactory. At the present high level of audio technology, there is little danger of sudden obsolescence of any one section of the receiver. This removes one of the major objections to "putting a lot of eggs in one basket."

I rarely encounter any difficulties in testing receivers. Most of them have tape-recording output jacks that permit the performance of the tuner section to be measured independently of the amplifier. And by feeding in test signals to the receiver's auxiliary inputs, I can evaluate the amplifier's performance without considering the tuner section.

The all-in-one receiver eliminates most system interconnections, and with them some of the doubts that beset a layman entering the world of high fidelity. However, it still requires the addition of a pair of speakers and a record player to form a complete music system. It is no simple task to make an intelligent choice of these components. The audio shopper is likely to receive conflicting suggestions from salesmen, friends, and equipment reviewers such as myself. Even after the choice is made, the neophyte is frequently faced with installation problems. If something is amiss with the final setup, he may find it difficult to trace the fault to a specific component.

Therefore, it was inevitable that manufacturers would begin to supply the record player and speakers, in ready-to-use form, together with an integrated amplifier and tuner. Plug-in connectors make correct speaker phasing a certainty, and speaker efficiency and response characteristics can be made compatible with (or even complimentary to) the amplifier characteristics. Anyone, audiophile or neophyte, can set up one of these "steroe compact" systems in a few minutes, and thus a new, broad market for high-fidelity equipment manufacturers is opened up.

Unfortunately, these systems present some awkward problems for the testing laboratory. I have had several discussions with my editors about the philosophy of testing packaged music systems, and I hope that we will soon be able to work out a satisfactory procedure. Certainly we cannot ignore one of the fastest-growing segments of the hi-fi component industry.

I would prefer to test the integrated system as though it were a collection of separate units: tuner, amplifier, record changer, cartridge, and speakers. It is usually possible, using the available inputs and outputs, to evaluate these items individually. If the system is treated in this manner, it is possible to compare it intelligently, component for component, with other systems composed of individually selected items.

Some integrated systems use specially designed components which complement the characteristics of other parts of the system. A good example is the popular KLH Model Eleven phonograph, which has a bass boost built into its amplifier to compensate for the natural roll-off in the speaker's response at low frequencies. It is obviously meaningless to rate either the amplifier or speaker by itself in such a case. A reasonable compromise is to measure the combined response of amplifier and speaker.

Power-output measurements of an amplifier in this sort of system are also not too meaningful. We are actually concerned with acoustic output of the speakers, but here, too, we cannot easily extrapolate measurements made in one room to deduce what the system will do in another environment.

However, most systems do not use pre-equalized amplifier response, and we feel that it is valid to measure the amplifier when it is driving 8-ohm resistance loads—assuming that the speakers are also 8 ohms. In such cases, we drive the speaker with test signals from another amplifier, as though it were not part of an integrated system.

If and when we do publish laboratory reports on integrated music systems, it is almost certain that they will be based on tests of the individual components. I have not been able to arrive at any acceptable alternate method, and would welcome comments and suggestions.

REVIEWED THIS MONTH

• Knight-Kit KG-415 Tape Recorder
• Dynaco PAS-3X Preamplifier Kit

JULY 1966
EQUIPMENT TEST REPORTS

By Hirsch-Houck Laboratories

KNIGHT-KIT KG-415 TAPE RECORDER

Until quite recently, it was rare to find a tape recorder selling for less than $400 to $500 that could record and play back an FM radio broadcast with such fidelity that it could not be distinguished from the direct broadcast. The Knight-Kit KG-415 satisfies this requirement of a true hi-fi tape recorder, yet costs only $249.95.

The tape transport itself is a Viking unit, fully assembled and tested. The kit builder has to mount and solder the components to the six plug-in printed boards that make up the active electronic circuitry, and install the switches and interconnecting wiring on the front panel. Adjustment of the recorder is greatly simplified by the inclusion of a 1,000-Hz oscillator which can be connected into the amplifiers as a test-signal source when adjusting the recorder’s bias and erase currents. The recorder’s own level-indicator meters are used in the bias adjustment, and the erase current is set by adjusting it (by ear) for optimum erasure of a tape previously recorded with the test signal. Knight’s kit instruction book is very well done and construction time ran about 30 hours.

The tape transport uses two motors, one to drive the capstan (stabilized by a 2-pound balanced flywheel and a flutter-filter belt), and one to drive the reels. The tape speeds are 7½ and 3¾ ips. The fast-forward and rewind speeds are very fast, requiring only 55 and 80 seconds, respectively, for 1,200 feet of tape. The playing speeds on our test unit were slightly fast, by about 30 seconds in 30 minutes of playing. The brakes, which act on both reels, worked very well, with no tendency to spill tape or otherwise handle it roughly.

The tape motion is controlled by a pair of concentric knobs. The outer one controls fast-forward and rewind operation, while the inner one puts the tape into normal motion or into a cuing mode. In the cue setting, the tape is held against the heads but is not driven by the motors. The tape may be manually positioned to locate a specific portion of the program for editing or cuing. A safety pushbutton in the center of the transport controls must be pressed in order to record (in addition to switching the electronic portion to record).

The heads of the Knight KG-415 are quarter-track laminated heads, with hyperbolic contours and very small gaps. It was evident from our tests that they were a major factor contributing to the unit’s excellent performance. There are separate erase, record, and playback heads.

The recording amplifiers have inputs for medium-impedance dynamic microphones (3,000 ohms) and line sources. The two input sources can be mixed. Not having a microphone rated at 3,000 ohms, we tried a high-impedance 50,000-ohm dynamic microphone with satisfactory results. Not all such microphones may work as well.

The KG-415 has separate transistor recording and playback amplifiers, so that a program can be monitored from the tape as it is being recorded. A monitor switch on the panel switches the monitor-output jacks (and the two illuminated VU meters) from the recording amplifiers to the playback amplifiers, facilitating comparison between incoming and outgoing signals. They proved to be indistinguishable when recording FM broadcasts at 7½ ips, except for a minute increase in hiss level. Even at 3¾ ips, there was no significant degradation other than the increased hiss, which was so slight as to be unnoticed except by direct comparison.

The function selector of the Knight-Kit KG-415 is a six-position switch, which indicates its setting by illuminating one of six windows on the panel. It has positions for playing back either channel through both amplifiers, or both in stereo. One can also record on either channel, or on both in stereo. To record, the selector must be in one of the RECORD positions and the red safety button on the transport must be pressed after the tape is in motion. Either action alone will not record or accidentally erase.

A three-position special-effects switch allows echo to be added to a recording while it is being made, or to make sound-on-sound recording (mono only). The latter worked better than most such systems we have encountered, with no noticeable degradation of the program being copied from one channel on to the other, together with the new program material.

In our laboratory measurements, the KG-415 had exceptionally flat, smooth frequency response. The playback response with the Ampex 31321-04 test tape at 7½ ips was within ±1.5 db from 50 to 15,000 Hz. The overall record-playback response was within ±0.5 db from 200 to 18,000 Hz, and within ±4 db from 27 to 19,000 Hz at 7½ ips. At 3¾ ips, it was within ±1 db from 37 to 13,000 Hz, which would be creditable performance for (Continued on page 34)
Prepare for another surprise.

What was the last product that astonished you? The Polaroid Land camera? Color television? James Bond’s Aston-Martin?

Perhaps it was the KLH Model Eight—the miniature FM radio that filled a room with music rather than with equipment.

When we introduced the Model Eight in 1960, it astonished all sorts of people. And lots of people bought it, including many who already owned ambitious sound systems.

The astonishment hasn’t worn off yet. We still get thank-you notes for Model Eights in use since 1960. And used Eights often command almost-new prices.

The new KLH Model Twenty-one is that same surprise all over again. It is the solid-state successor to the Eight. It sounds the same, exactly the same. It is a bit smaller and a shade more sensitive to the weakest FM stations on the dial. It costs half as much as the Eight, exactly half.

We call the Model Twenty-one an FM Receiving System. Besides being a self-contained FM radio with its own speaker, it has outputs for external speakers (including a special matching KLH accessory speaker), for making tape recordings, or connecting as a tuner to a separate sound system. You can shut off its internal speaker when you want the tuning dial at hand and the sound from across the room. Or you can play an extension speaker simultaneously in another room.

It won’t do everything. You can’t make it stereo or plug a record player into it. (See one of our complete high-performance music systems for that.) It will just give you pleasure out of all proportion to its size and cost.

If you didn’t believe you could ever again be astonished by a high fidelity product, make sure you hear the Model Twenty-one.

For more information, write: KLH, 30 Cross Street, Cambridge, Mass. 02139, Dept. 900.

Suggested Price: $79.95;
Optional accessory speaker: $24.95

The new KLH Model Twenty-one FM Receiving System.
many competitive recorders at 7½ ips, and is quite suitable for high-quality home recording.

Wow and flutter, 0.02 and 0.09 per cent, respectively, at 7½ ips, were negligible and significantly bettered the Knight rating of 0.2 per cent. The KG-415 worked flawlessly, producing recordings which at normal listening levels could not be distinguished from the original FM program. Other recorders can do this, too, but they generally cost $500 or more. The Knight KG-415 is, without a doubt, one of today's best values in tape recorders. It is made to order for the hobbyist on a budget who will not compromise his quality standards.

The Knight KG-415 sells for $249.95 in kit form. A factory-wired version, the KN-4450, is now offered at $299.50 and is well worth its price as well. A walnut base costs $19.95, a portable case $29.95.

For more information, circle 188 on reader service card

DYNAKO PAS-3X PREAMPLIFIER KIT

- A well-designed product can usually withstand the test of time, which probably accounts for the continued popularity of the Dynaco PAS-3 preamplifier after some six years with no significant changes. The PAS-3 combines a remarkable simplicity of design (using only two tubes per channel) with an overall level of performance comparable or superior to some other units selling for several times its price.

Dynaco, not willing to rest on its laurels, has recently announced the improved Model PAS-3X. The "X" refers primarily to the new tone-control circuits (patent applied for). The control potentiometers are specially designed to provide a truly flat response when centered. In their mid-positions they are effectively removed from the circuit, with no effect on frequency response or phase shift. Previously this has only been possible with special circuit switching or step-type tone controls. The Dynaco design provides complete assurance to the user that he can adjust his amplifier for flat frequency response. (It is surprising, incidentally, to see how far some tone controls deviate from flat response when mechanically centered.)

The output of the PAS-3X, like that of its predecessors, is taken from the plate circuit of a tube, through the tone-control circuits. While the output circuit of the original PAS-3 was fairly sensitive to load impedance, that of the PAS-3X has been redesigned to make it suitable for driving transistor power amplifiers (such as Dyna's Stereo 120) with input impedances lower than 500,000 ohms.

The use of negative feedback in the phono-equalizer and tone-control circuits reduces distortion to the vanishing point. A d.c. filament supply for all tubes contributes to a low hum level. The input selector has positions for tape head, phono input, FM/AM, FM multiplex, and two spares (one low-level and one high-level). The low-level spare input can be equalized for another tape head or phono cartridge, or left unequalized to serve as a microphone input.

The PAS-3X has separate bass and treble tone controls for each channel—four in all. It has switchable loudness compensation, an extremely effective scratch filter (one of the best we've seen), and tape-monitoring facilities.

The stereo/mono mode switch is a unique feature of the PAS-3X. It has positions for full stereo, fully mixed mono (A+B), either A or B through both speakers, and two blend positions.

One of the blend positions has been modified in the "X" version to be compatible with Dynaco's derived center-channel system for three-speaker stereo. This technique provides a smooth gap-free stereo spread even with rather wide speaker spacing.

Our laboratory measurements on the Dynaco PAS-3X confirmed its impressive performance specifications. The "flat" response varied less than 0.5 db from 20 to 20,000 Hz. The tape and phono equalization were by far the most accurate we have ever measured, within 0.8 db of the ideal response from 20 to 20,000 Hz. The scratch filter gave a response within ±1 db up to 7,000 Hz, falling at an excellent 18 db per octave above that frequency. Distortion was at the residual level of our test equipment at any usable output level. It reached 1 per cent (IM) at 4.4 volts output, and 0.1 per cent (1 kHz) harmonic distortion) at 13.5 volts. Hum was totally inaudible at 70 db below 1 volt on low-level inputs, and unmeasurably low on high-level inputs.

In conclusion, the Dynaco PAS-3X is, like its predecessor, an outstanding preamplifier—it would be a bargain at twice its price. Construction of the kit should take about eight hours, and the instructions are up to Dyna's usual high standards. Owners of the PAS-3 (or the older PAS-2, which is identical except for styling) may convert them to the "X" version with the TC-3X kit which costs $10. The PAS-3X is $69.95 in easy-to-assemble kit form, or $109.95 factory wired (as the PAS-3X/A).

For more information, circle 189 on reader service card
Compare these new Sherwood S-8800 features and specs! ALL-SILICON reliability. Noise-threshold-gated automatic FM Stereo/mono switching, FM stereo light, zero-center tuning meter, FM interchannel hush adjustment, Front-panel mono/stereo switch and stereo headphone jack, Rocker-action switches for tape monitor, noise filter, main and remote speakers disconnect. Music power 140 watts (4 ohms) @ 0.6% harm distortion. IM distortion 0.1% @ 10 watts or less. Power bandwidth 12-35,000 cps. Phono sens. 1.6 mV. Hum and noise (phono) —70 db. FM sens. (IHF) 1.8 μV for 30 db quieting. FM signal-to-noise: 70 db. Capture ratio: 1.5 db. Drift ±0.03%. 42 Silicon transistors plus 14 Silicon diodes and rectifiers. Size: 16½ x 4½ x 14 in. deep.

Now, look at the new Sherwood specs!

<table>
<thead>
<tr>
<th>Model</th>
<th>V-Vacuum Tube S ALL-SILICON T-Germanium Transistor</th>
<th>Power (IHF) 2 channels 4 ohms Watts</th>
<th>FM Sensitivity Microvolts</th>
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Referenced T or V & T above may include some Silicon transistors.
Figures above are manufacturer's published specifications except (*) which are published test findings.
For 1 channel, a channel rating not specified.

S-8800 140-watt FM ALL-SILICON Receiver
$359.50 for custom mounting
$368.50 in walnut leatherette case
$487.50 in hand-rubbed walnut cabinet

Sherwood Electronics Laboratories, Inc., 4300 North California Avenue, Chicago, Illinois 60618. Write Dept. R7

CIRCLE NO. 47 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
A misreading of Sts. Paul and Timothy gave to the world the phenomenal voices that dominated the first two centuries of opera

THE CASTRATI

By HENRY PLEASANTS

In the first of two articles adapted from his forthcoming book The Great Singers (to be published by Simon and Schuster in September) Henry Pleasants discusses the origin and the effects of a practice that produced a unique and exacting vocal art. Mr. Pleasants is also author of The Agony of Modern Music, Vienna’s Golden Years of Music, and The Musical World of Robert Schumann.

A commonplace of program notes and jacket liners on Baroque vocal music is a reference to the problem of finding singers today, male or female, able to sing the appalling difficulty music originally written for castrati, men whose boyish treble voices were preserved into their maturity by castration. But it is doubtful that many readers of such commentaries appreciate the fact that these castrati dominated the first two centuries of opera history and that it was they who established the conventions and criteria of what we now call bel canto.

Of the hundreds, even thousands, of mutilated men whose vocal art excited spasms of ecstasy among the Italian citizenry, the British aristocracy, and the courtiers of every capital in Europe, only Farinelli (born Carlo Broschi) is widely remembered; and even his fame endures largely because of his singular service in singing the same four songs every night for a decade to quiet the melancholy abatements of Philip V of Spain. But there were others almost as good and, in their time, hardly less famous (among them Senesino, Caffarelli, and Carestini) for whom Handel composed some of his finest arias—the famous Largo in Xerxes was written for Caffarelli. In a later Golden Age there were Gasparo Pacchierotti, Girolamo Crescintini, and Luigi Marchesi. Pacchierotti, rather than Farinelli, was considered by many connoisseurs at the end of the era to have been the greatest castrato singer of them all.

Of the origin and extent of this ghastly practice, and of the character of the life and times of the castrati themselves, almost nothing is generally known. This is partly because most of the music they sang is obsolete; but it is also because the entire phenomenon appears in retrospect as a morally shameful episode, its cynicism exemplified in the exultant cry of Viva il coltello! (Long live the knife!) with which Italian enthusiasts used to honor an exceptional virtuoso performance by a castrato. Today, with the revival of a taste for bel canto stimulated by the example of Maria Callas, Joan Sutherland, Giulietta Simionato, Teresa Berganza, Marilyn Horne, and Montserrat Caballé, a further exploration of Baroque opera seems inevitable and a general acquaintance with some details of the reign of the castrati essential.

How could such a thing become socially acceptable and morally tolerable? Well, it all began—perfectly innocently—with St. Paul and St. Timothy. "Let your women keep silent in the churches," St. Paul wrote to the Corinthians (1 Corinthians 14:34). And St. Timothy echoes the injunction: "Let a woman," he said (1 Timothy 2:11-12), "learn in silence, with all submissiveness. I permit no woman to teach or to have authority over men; she is to keep silent."

St. Paul and St. Timothy, in the view of contemporary theology, meant simply that women should not participate in theological disputation, or presume to teach men. Neither of them was otherwise unappreciative of women's contribution to the early Christian communities. But, in the interpretation of the Church of Rome, the injunction was absolute, and women were forbidden, accordingly, not only to speak in church, but also to sing. Delighted, possibly, with the ensuing serenity, the church extended the prohibition to the theater, too; and this latter restriction endured, in Rome, at least, well into the eighteenth century.

The absence of female voices in the music of the church was accommodated easily enough in the relatively simple strains of the Middle Ages. One could make do with men and boys. But in the latter half of the sixteenth century, the complexity of multiple-voiced song, an inheritance from the Netherlands contrapuntists, created a problem susceptible only of a surgical solution. The boys' voices were not strong enough to hold up the treble parts, and the musicianship required for the secure execution of this exacting music was such that the boys, by the time they had acquired it, were either boys no longer or had, at best, no more than a year or so to go.

Attempts were made to overcome the difficulty with male falsettists. The art of falsetto singing was, for a time, a Spanish monopoly, and, in the Sistine Chapel, the mo-

The Italian male soprano Angelo Maria Monticelli (1710-1764) in the elaborate costume and classically stylized singing posture of the castrati.
nopoly of falsettists imported from Spain was absolute. The Spaniards seemed to have discovered a secret for making the falsetto male soprano, or alto, sound sweeter than it normally does, and for giving it greater range and flexibility. It has been suggested that the secret was, in fact, surgical, that the Spanish falsettists were really castrati. Some of them probably were. But in 1599, two Italian castrati, Pietro Paolo Folignato and Girolamo Rossini, were admitted to the Sistine Chapel—over the vehement protests of the Spanish falsettists—and the age of the castrato was born open with the new century.

Castration itself—excepting a disputed pronouncement by Pope Clement VIII—was never sanctioned. Indeed, the operation was punishable by death; and any association with such surgery, as an accomplice, for example, called for excommunication. But the church's attitude seems to have been that the victim, once the irrevocable deed was done, might as well be encouraged to serve both the church and himself in the most congenial and profitable field thereafter open to him.

Since a castrato's earnings could be enormous—in the church, initially, or as an appurtenance of the church dignitary's private musical entertainment, and later in opera—there grew up, inevitably, a flourishing black market. Impoverished parents sought out surgeons or did the job themselves, in the hope of securing a comfortable old age supported by a famous castrato's fortune. At a time during the eighteenth century, when the reign of the castrato was supreme, it is estimated that as many as four thousand boys were castrated in Italy each year. Very few of them became either famous or rich.

During the earliest years of the practice, some boys were castrated in infancy, obviously on the assumption that castration alone would make them good singers. Later on, they would have had to display both voice and musical talent before a decision for castration was made. In some instances castration was accomplished on the initiative of the child himself, his success as a boy soprano already having given some promise of a brilliant operatic career.

Few specifics have come down to us about just where and how the surgery was accomplished, which is hardly surprising in view of its illegality and the delicacy—or indelicacy—of the subject. The English musicologist Charles Burney looked into the matter during his travels in Italy in 1770 without success: "I was told at Milan that it was at Venice; at Venice that it was at Bologna; but at Bologna the fact was denied, and I was referred to Florence; from Florence to Rome, and from Rome I was sent to Naples. The operation most certainly is against law in all these places, as well as against nature; and all the Italians are so much ashamed of it that in every province they transfer it to some other."

There is no way of determining how frequently this comparatively simple operation was performed by parents rather than by surgeons. In any case, the illegality of the deed, and the shame of the parents' complicity, inspired many a tortured alibi. In some cases the infamy was alleged to have stemmed from injury in a childhood fracas. In others the boy was the victim of dogbite, a fall from a horse, or some pathological circumstance that made the operation necessary. One castrato was supposed to have been bitten by a wild pig, and another to have been attacked thus grievously by a wild goose, an attribution more treasurable, certainly, for its imagery than its candor.

The vocal consequences of castration went well beyond the mere perpetuation of a boyish treble. The child continued to grow, and so did his voice—or at least his physical powers to exploit the voice he already had. Under the rigid discipline to which he would now be exposed, his lung capacity and diaphragmatic support would be augmented to an extraordinary degree, enabling him to sustain the emission of breath in projection of tone up to a minute or more, which is beyond the ability of most normal adult male and female singers. The mature castrato was a boy soprano, or alto, with all the physical resources of a grown man, although there was, of course, as a certain castrato expressed it wishfully, "something missing."

Burney may not have known that the subject of castrati had been investigated rather thoroughly sixty years earlier by a French lawyer, Charles d'Ançillon. His report was published in 1707 as Traité des Eunuques, and it appeared in an anonymous English translation, together with additional material, in 1718. The anonymous translator singles out, on his own account, three of the castrati whom he heard in Rome in 1705-1706—Pauluccio, Pasqualone, and Jeronimo. His report is better than those of professional critics—who took the castrato sound for granted—in that he conveys some idea of just what it was about that sound which inspired such ecstasy and made castrati the undisputed rulers of the operatic roost for nearly two centuries.

Of Pauluccio, for instance, he writes that "this eunuch, who was then about nineteen years of age, was indeed the
wonder of the world. For besides that his voice was higher than anyone else’s, it had all the warblings of a nightingale, but with only this difference, that it was much finer; and did not a man know the contrary, he would believe it impossible such a tone could proceed from the throat of anything that was human.” He described Jeronimo’s voice as “so soft and ravishingly mellow that nothing can better represent it than the flute stops of some organ.” Elsewhere he compares Jeronimo’s sound with “the gentle fallings of water I have somewhere in Italy often heard, lulling the mind with a perfect calm and peace.”

From the foregoing it may be inferred that Pauluccio was a soprano, Jeronimo a mezzo-soprano or contralto. A number of castrati, it should be added, who began as sopranos became contraltos or mezzo-sopranos in the course of their careers. A beautiful lower range was often late in developing, and, as with unmutilated men, the top notes were commonly the first to go.

Beyond the preservation of a boy’s treble voice, the effects of castration upon his further physical development were considerable. He would be beardless, of course, but the hair on his head would be thicker and more luxuriant. He would probably grow to above an average height, and in middle age would be more prone than normal men to obesity. His movements might—but not necessarily—be somewhat ungainly. An anonymous Reflections upon Theatrical Expression in Tragedy, published in London in 1775, for instance, includes the following reminiscence of Farinelli as an actor:

“What a pipe! What modulation! What ecstasy to the ear! But heavens! What clumsiness! What stupidity! What offence to the eye!... If thou art within the environs of St. James’s thou must have observed in the park with what ease and agility a cow, heavy with calf, has arose up at the command of the milkwoman’s foot: Thus from the mossy bank

sprang up the divine Farinelli. Then with long strides advancing a few paces, his left hand settled upon his hip, in a beautiful bend like that of the handle of an old-fashioned caudle-cup, his right remained immovable across his manly breast, till numbness called its partner to supply the place: when it relieves itself in the portion of the other handle of the caudle-cup.”

Generally speaking, homosexuality does not seem to have been more common among castrati than among unmutilated men. The effects of castration upon their sexual appetite seem to have been various. It was not, as a rule, extinguished. The operation deprived them of the power of procreation, but not of the possibility nor the pleasure of engaging in unfruitful intercourse. In some of the victims the sexual drive would seem to have been intensified, possibly because of their inability to achieve full sexual satisfaction. Or they may have behaved under the compulsion of a consciousness of inferiority.

Women sought them out, impelled, no doubt, by various combinations of curiosity, prudence, compassion, and, presumably, security from conception. Since the castrato could bring only an immature member to such an intimacy, there were doubtless many deviations from normal sexual intercourse. The love affairs of the castrati were, nevertheless, numerous, often with women of high birth and position, and accounts of many such affairs have come down to us among the more amusing and bizarre scandals of the seventeenth and eighteenth centuries. Indeed, the castrato was virtually condemned to scandalous relationships, for the Catholic Church could not, and never did, countenance a castrato’s marriage (because procreation was impossible), and the Protestant denominations were hardly less adamant.

For the rest, the castrati were normal enough. In character and disposition they manifested the familiar attributes
of good and evil in the usual proportions. There were the mean and vicious among them, but also individuals of noble character and extensive cultivation. Farinelli, during his long stay at the Spanish court, proved himself to be both an excellent politician and statesman and a man of exceptional humility, integrity, and devotion.

Much has been made of their alleged arrogance, vanity, and pompous posturing, but this would seem to be one of those cases where the notorious excesses of a few came to be associated with the generality. Nor should it be surprising that among those deprived of the appurtenances and faculties about which men tend to be, either privately or publicly, most vain, some should have been inordinately concerned with such accomplishments as were still within their reach.

Not surprisingly, they could be jealous, too. Michael Kelly, the Irish tenor who sang the roles of Basilio and Don Curzio in the first performance of The Marriage of Figaro, and the English soprano Nancy Storace, Mozart’s first Susanna, were in Florence about 1780. There Storace was second woman to Luigi Marchesi in an opera by Francesco Bianchi. As Kelly tells us in his memoirs:

"Bianchi had composed the celebrated cavatina, 'Sembianza amabile del mio bel sole,' which Marchesi sang with the most ravishing taste; in one passage he ran up a flight of semitone octaves, the last note of which he gave with such exquisite power and strength that it was ever after called la bomba di Marchesi! Immediately after this song, Storace had to sing one, and was determined to show the audience that she could bring a bomba into the field also.

"She attempted it, and executed it, to the admiration and astonishment of the audience, but to the dismay of poor Marchesi. The manager requested her to discontinue it, but she peremptorily refused, saying that she had as good a right to show the power of her bomba as any one else. The contention was brought to a close by Marchesi’s declaring that if she did not leave the theater, he would; and, unjust as it was, the manager was obliged to dismiss her and engage another lady who was not so ambitious of exhibiting a bomba."

But vainglory, arrogance, impertinence, and pompous airs have never been confined in this world to singers alone, nor, among singers, to castrati. Vain singers are with us today, male and female. How long has it been since Giuseppe di Stefano threatened to cancel an appearance in Philadelphia because an advertisement in the program at the Academy of Music billed Franco Corelli as the world’s greatest tenor? (He finally agreed to sing on condition the distribution of the offending program book be stopped.)

The life of a castrato followed a fairly predictable course, beginning with a tough and exacting schooling. Angus Heriot, for instance, author of The Castrati in Opera, cites the following regimen for the young Caffarelli as a pupil of Nicola Porpora (who also taught Haydn): “In the morning an hour of singing difficult passages, an hour of letters [diction and enunciation] and an hour of singing exercises before a mirror; in the afternoon a half hour of theory, a half hour of counterpoint on a canto fermo [improvisation], an hour of counterpoint with the cartella [blackboard], and another hour of letters. The rest of the day was spent in exercise at the harpsichord and the composition of psalms, motets, etc."

If this was typical, and there is no reason to doubt that it was, it is hardly surprising that so many of the castrati were also composers of sorts, and considered themselves qualified to make their own decisions in regard to ornamentation, appoggiaturas, cadences, and melodic variants. Nor should it be surprising that composers felt no compunction about consulting with the better singers in shaping their recitatives and arias. Some of the castrati were trained at musical conservatories, which had originally been charitable institutions; others studied privately—with Antonio Pistocchi in Bologna, for example—and some teachers at the conservatories took private pupils, as did Porpora in Naples, but it may be assumed that the regimen was no less severe, whatever the circumstances.

When the master felt that his pupil was sufficiently advanced, by which time the boy would normally be fifteen or sixteen, he would arrange for an operatic debut, usually in a female role, in which his pupil’s youth, fresh appearance, and unblemished voice might best be exploited. At that time, if he had not already done so, the boy would probably, but not invariably, take a pseudonym, derived, as a rule, from the name of his patron or benefactor, his teacher or his birthplace. Gioacchino Conti (1714-1761), for example, took the name Gizziello as a tribute to his teacher, Domenico Gizzi, just as Anton Hubert, born of German parents in Verona around the turn of the eighteenth century, and one of the very few non-Italian castrati, took the name of Porporino to honor his teacher Porpora. Sennesino (Francesco Bernardi) took his name from Siena,

The celebrated Luigi Marchesi (1755-1829), he of the bomba.
his birthplace, and Gaetano Majorano performed under the name Caffarelli, which was that of his benefactor. The pseudonym was not, however, obligatory, and some castrati sang under their own names.

The young castrato’s initial success or failure would determine whether he was destined for a career in the theater or for a life of drudgery and indignity in churches and chapel choirs—or worse. “Nothing in Italy is so contemptible,” Ancillon’s translator noted, “as a castrato that cannot sing.” Assuming a decent success, he would then do a good deal of traveling, gaining experience and establishing his credentials and building a reputation.

If all went well, he would accept a position in some court, where in the court record he would be distinguished from other singers by the designation musico, a euphemistic avoidance of the all too explicit castrato or evirato. The term “musico,” after the disappearance of the castrati from opera, was passed on, curiously, to female contraltos and mezzo-sopranos specializing in male roles.

Following their apprenticeship in female roles, the successful castrati would move on to the heroic males. The subject of Baroque opera was exclusively mythological and classical, and audiences of the time were undisturbed by the incongruity of hearing Hercules, Achilles, Caesar, Pompey, Tancred, and other heroes address their companions and the world in a high-pitched soprano. This acceptance of the treble voice did not die with the passing of the castrati. Rossini in his Tancred e Idrisi gave the title role to a female contralto, and as late as 1847 the baritone role of Don Carlo in Verdi’s Ernani was sung in London by Marietta Alboni, a mezzo-soprano. Rossini’s Otello, while written for a tenor, was often sung by sopranos, including the legendary Giuditta Pasta. The absurdity survives even today in our easy acceptance of such roles as Octavian, Cherubino, Nicklausse, and Siebel.

The careers of the castrati were longer, as a rule, than those of unmutilated men. They started younger, and vocal decay set in rather later, although not invariably. Angelo Maria Monticelli (1715-1758) was only thirty-seven when a Neapolitan impresario wrote of him that “he neither wishes to, nor should, be heard.” But set in it did, and the chronicles are full of references to castrati who clung to their careers longer than was prudent. In due course, they would retire, usually to settle down in a pleasant villa in their native Italy, often in the place of their birth, possibly to teach, certainly to welcome visitors and relive with them the hours of their glory, deploring the estate into which the vocal art had fallen—as singers have done ever since, and probably not without reason.

The last of the Spanish soprano falsettists in Rome died in 1625. Spanish castrato falsettists survived at the Sistine Chapel until near the end of the century. Castrati, on the other hand, continued there for another two centuries, and long beyond their disappearance from the opera scene. The last of the operatic castrati was Giovanni-Battista Velluti, for whom Meyerbeer wrote his early I Crociato in Egitto, produced in Venice in 1824. The last of the great church castrati was Domenico Mustafà (1859-1912), who was director of the Papal music until his retirement in 1895.

The last of the line at the Sistine Chapel was Alessandro Moreschi (1858-1922), who retired in 1913. His voice can be heard on a number of records made by the Sistine Chapel Choir under his direction shortly after the turn of the century. Although once the possessor of a voice of great beauty, Moreschi was not a brilliant performer, and he was past his prime when these records were made. They are treasurable as the only clue we have to how the castrati really sounded. It is important, however, when listening to them to remember that it is a singer—and most probably not a great singer—in his mid-forties that we are hearing, and not a Farinelli or Caffarelli in his early twenties. It is the faint echo of another time we hear, a time strange to us, and it is perhaps even stranger to realize that the distant age of the castrati and the modern age of the phonograph once, if ever so slightly, overlapped.
THE BASIC REPERTOIRE
UPDATINGS AND SECOND THOUGHTS—PART TWO

By MARTIN BOOKSPAN

This month I address myself to the second and concluding installment of this year’s updatings and second thoughts on recommended recordings of the “Basic Repertoire.” I take up the roster of works at the point the June installment ended, and consider the new recordings issued since last year’s updatings. Tapes are commented on when they are available.

**Mahler: Symphony No. 4 in G**—The recent Szell-Cleveland Orchestra recording (Columbia MS 6833, ML 6233) has some exceptionally fine moments, especially the ravishingly beautiful treatment of the last movement, in which Judith Raskin is the superb soprano soloist. I find Leonard Bernstein (Columbia MS 6152, ML 5483) more personally involved with the music, however. But Bruno Walter’s old mono-only collaboration with Desi Halban and the New York Philharmonic (Columbia ML 4031, a recent dropout) continues to be unequalled. Of the three available tapes, the Szell performance (Columbia MQ 783) is my recommendation.

**Mahler: Symphony No. 9 in D**—Bruno Walter’s intensely moving performance (Columbia M2S 676, M2L 276—tape M2Q 516) remains supreme, but Barbirolli’s passionate reading (Angel S 3652, 3652) runs a very close second.

**Mendelssohn: Violin Concerto in E Minor**—Erick Friedman’s recent recording (RCA Victor LSC/LM 2865) adds another distinguished version to a list that includes superb performances by Francescatti (Columbia MS 6758, ML 6158), Stern (Columbia MS 6062, ML 3379), Milstein (Angel S 35730, 35730), and Szeryng (Mercury SR 90106, MG 50406) and a very good budget-priced disc by Laredo (RCA Victrola VICS/VIC 1033). The Francescatti and Milstein performances are the best on tape, in my opinion (Columbia MQ 742 and Angel Y2S 36501, respectively, the latter a 3⅞-ips tape).

**Mendelssohn: Symphony No. 3 in A Minor (“Scottish”)**—Nothing new since last year: the Maag-London Symphony performance (London CS 6191, CM 9252) continues to be the outstanding recording and also the only available tape (London L 80083).

**Mendelssohn: Symphony No. 4 in A (“Italian”)**—The Steinberg performance, the one I previously preferred, is no longer listed in the Schwann catalog. Of the versions currently available, the Szell-Cleveland Orchestra recording (Epic BC 1259, LC 3859) is now my recommendation among contemporary performances; the Toscanini mono-only account (RCA Victor LM 1851), however, possesses very special characteristics of sophistication and élan. Among the three available tapes, my first choice is the Maazel-Berlin Philharmonic version (Deutsche Grammophon C 8681).

**Moussorgsky-Ravel: Pictures at an Exhibition—Ansermet** (London CS 6177, CM 9246—tape K 80054) continues as my stereo-mono recommendation, and the Toscanini recording (RCA Victor LM 1838—not LME 2110, the “electronic stereo reprocessing”) is still supreme for dramatic flair and atmosphere. Stokowski’s recent recording of his own transcription of the music (London SPC 31006, PM 35004—tape L 75006) is lots of fun if one can ignore its occasional circus-garishness and the fact that a couple of the pictures have been removed from the gallery.

**Mozart: Clarinet Quintet in A**—Alfred Boskovsky and members of the Vienna Octet (London CS 6379, CM 9379) retain first place, in my estimation. The only tape version is the more dispassionate and impersonal account by Reginald Kell and the Fine Arts String Quartet (Concertapes 4005).
Mozart: Symphony No. 39 in E-flat—Klemperer (Angel S 36129, 36129), Szel ( Epic BC 1106, LC 3740), and Walter (Columbia MS 6193, ML 5893) all offer convincing performances. Strangely, Klemperer's is the only one currently available on tape (Angel Y3S 3662), a 3½-ips reel that contains readings of the last six Mozart symphonies.

Mozart: Symphony No. 40 in G Minor—The situation is unchanged since last year: Klemperer's performance (Angel S 36183, 36183—tape Y3S 3662) is intense, Walter's (Columbia MS 6191, ML 5891—tape MQ 611) warmly lyrical. Both are highly recommended.

Mozart: Symphony No. 41 in C ("Jupiter")—The only new release since this time last year is a fine performance conducted by Sir John Barbirolli (Vanguard 1805D, 180). But the Bruno Walter recording (Columbia MS 6255, ML 5655—tape MQ 436), with its autumnal nobility, continues to be my stereo mono-favorite. And no performance has yet challenged the Herculean strength of the Toscanini mono-only recording (RCA Victor LM 1030).

Prokofiev: Symphony No. 5 in B-flat—Of available performances, the one by Ansermet (London CS 6106, CM 9046—tape LCK 80156) combines lyricism and dynamic vigor, and it is my first choice.

Prokofiev: Peter and the Wolf—London has just released a Phase 4 recording of this score conducted by Antal Dorati, with narration by the James Bond movies' Agent 007, Sean Connery. Text has been altered ("cat" becomes "pussycat") accordingly; Connery sounds bored. Conductor Efrem Kurtz and narrator Michael Flanders—in a straightforward, no-nonsense account on Capitol SG/G 7211—continue to impress me. Among the tape versions, the one conducted by Sargent with narration by Lorne Greene (RCA Victor FTC 2204) is direct and unimpeached.

Rachmaninoff: Piano Concerto No. 2 in C Minor—Three young pianists not yet in their forties have all recorded superb performances of this score: Ashkenazy (London CS 6390, CM 9390—tape K 80139), Grafman (Columbia MS 6634, ML 6034—tape MQ 657), and Janis (Mercury SR 90260, MG 50260—tape ST 90260). The ne plus ultra among recorded versions, however, is the 1929 performance by Rachmaninoff himself, with the Philadelphia Orchestra conducted by Stokowski (either RCA Victor LCT 1014 or LM 6123).

Rachmaninoff: Piano Concerto No. 3 in D Minor—The special qualities of the Ciburn-Kondrashin collaboration (RCA Victor LSC/LM 2355—tape FTC 2001) lift this performance above all others. Also meritorious are the versions by Ashkenazy with Piotoulari (London CS 6359, CM 9359—tape K 80125) and Janis with Munch (RCA Victor VICS/VIC 1032). And still extraordinarily exciting is the Horowitz-Reiner recording (RCA Victor LM 1178, mono only).

Ravel: Daphnis and Chloé—The new Ansermet recording (London CS 6456, CM 9456) is one of the finest accomplishments in the long career of this distinguished conductor. The breadth and drama of his Daphnis and Chloé make it first in my affections among all the available recordings of the complete score. Of the recording of the Second Suite from the ballet, the Martinon-Chicago Symphony version (RCA Victor LSC/LM 2806—tape FTC 2196) is still unrivalled in performance and engineering.

Rimsky-Korsakov: Scheherazade—From among the twenty-odd available recordings, one stands head and shoulders above the others: Beecham's (Angel S 35505, 35505—tape ZS 35505), a miracle of spontaneous re-creation.

Rossini: Overtures—The special flair of Toscanini (RCA Victor LM 2010) is apparent through sonics that tend to be shrill and harsh. Among more recent collections, the outstanding ones are led by Bernstein (Columbia MS 6133, ML 5933), Garni (London CS 6201, CM 9273—tape I. 80096), and Reiner (RCA Victor LSC/LM 2318—tape FTC 2021).

Saint-Saëns: Symphony No. 3 in C Minor—Still unchallenged in its supremacy is the recording by Munch and the Boston Symphony Orchestra, with Berj Zamkochian as organ soloist (RCA Victor LSC/LM 2341—tape FTC 2029).

Saint-Saëns: Carnival of the Animals—The Kurtz recording, with Hephzibah Menuhin and Abbey Simon as the duo-pianists (Capitol SG/G 7211), leads the field among performances that do not include a spoken narrative. The lyrics that Ogden Nash wrote for the music are most effectively spoken by Noel Coward in the pioneering Kostelanetz recording (Columbia CL 720). Of the tape versions, Bernstein's (Columbia MQ 498) is the most satisfying.

Schubert: Symphony No. 8 in B Minor ("Unfinished")—Walter's performance (Columbia MS 6218, ML 5618—tape MQ 391) is a cherishable reminder of that conductor's characteristic qualities of geniality and serenity. An unusual bargain for tape buffs is the reel containing the monolithic Klemperer performance (Angel Y2S 3666, 3½ ips): it also holds Klemperer's performances of two other Schubert symphonies, the Fifth and the Ninth.

Schubert: Symphony No. 9 in C—Nothing new since last year: my favorites among modern recordings are the performances by Krips (London CS 6061, CM 9007—tape L. 80015) and Walter (Columbia MS 6219, ML 5619—tape MQ 467). The Toscanini-Philadelphia Orchestra performance (RCA Victor LD 2665) is an incandescent memento of the conductor's 1942 guest engagement with that orchestra.

Schubert: Quintet, in A, for Piano and Strings ("Trout")—The recent vernal account by an ensemble including Peter Serkin as pianist and Alexander Schneider as violinist (Vanguard VSD 71145, VRS 1145) is now my choice for a recorded "Trout." The Vienna Octet version with Clifford Curzon is the best tape (London L 80092).

Schubert: Quintets, in C, for Strings—The new version by members of the Vienna Philharmonic Orchestra (London CS 6441, CM 9441) is even more successful in communicating the rich lyrical flow of this score than is the recording by the Budapest Quartet and Benar Heifetz (Columbia MS 6336, ML 5936). Strangely, no tape version of this masterpiece is listed in the current catalog.

Schumann: Piano Concerto in A Minor—The passionate account by Serkin (Columbia MS 6688, ML 6088—tape MQ 707) continues to be my favorite among sonically up-to-date recordings. The mono-only recording by Lipatti (Columbia ML 4525) is one of the most extraordinary recordings left to us by this lamentably short-lived musician.

Schumann: Symphony No. 1 in B-flat ("Spring")—The Kubelik recording (Deutsche Grammophon 138860, 18860—tape C 8860), with its genuine Romantic glow, is my choice.
**Shostakovich: Symphony No. 5**—The recent André Previn recording with the London Symphony Orchestra (RCA Victor LSC/LM 2866) has very good moments, but the Bernstein performance (Columbia MS 6115, ML 5115—tape MQ 375) is even better—more dramatic and more fiery.

**Sibelius: Symphony No. 1 in E Minor—Maazel** (London CS 6575, CM 9375—tape K 80162) delivers a taut, dynamic reading. Also very good is the performance conducted by Barbirolli (Vanguard 132SD, 132).

**Sibelius: Symphony No. 2 in D**—The new recording by George Szell and the Concertgebouw Orchestra of Amsterdam (Philips PHS 900092, PHM 500092) comes closer than any other performance I have heard to duplicating the special intensity and excitement that Serge Koussovitzky brought to this music. The Szell performance is now my preferred version. It is not as yet available on tape; until it is, Maazel’s account (London K 80162) will serve.

**Sibelius: Symphony No. 5 in E-flat**—Since last year’s updatings, Columbia has released a new recording of this symphony conducted by Bernstein (MS 6719, ML 6119—tape MQ 765) and RCA Victor has rereleased, in the budget-priced Victrola line, the memorable performance by the London Symphony under Alexander Gibson’s direction (VICS/VIC 1016). Thus, along with the Barbirolli recording (Vanguard 137SD, 137), there are now three excellent stereo- mono versions of this symphony from which to choose.

**R. Strauss: Don Juan; Till Eulenspiegel**—Of the various recordings that couple these two masterly symphonic poems, the two most immediately winning are those by Bernstein (Columbia MS 6822, ML 6222—tape MQ 799) and Szell (Epic BC 1011, LC 3130—tape EC 805). Also of considerable merit are the recordings by Klemperer (Angel S 35737, 35737—tape ZS 35737) and Stokowski (Everest SDBR 3023, LPBR 6023—tape 11 3023).

**R. Strauss: Der Rosenkavalier**—Situation unchanged from last year: the Kleiber recording (London 1401, mono only) with the Vienna Philharmonic Orchestra, the Vienna State Opera Chorus, and a cast featuring Maria Reining, Hilde Gueden, Sena Jurinac, and Ludwig Weber is one of the great recordings of all time. Of the two available stereo recordings of the score, my nod goes to Angel’s Karajan-led version (S 3563, 3563), with Elisabeth Schwarzkopf, Christa Ludwig, and Otto Edelmann. This performance is also available on a superb single-reel 3½-ips tape (Angel YFS 3563).

**Stravinsky: Petrouchka**—Both Ansermet (London CS 6009, CM 9229—tape K 80006) and Monteux (RCA Victor LSC/LM 2376—tape FTC 2007) offer readings of extraordinary dramatic insight and poetic sensitivity. The version by Stravinsky himself (Columbia MS 6352, ML 5732—tape MQ 471) is leaner and more ascetic—he uses the reduced orchestration of 1917—but no less exciting.

**Stravinsky: Le Sacre du printemps**—The recent performance conducted by Pierre Boulez (Nonesuch 71093, 1093) is a rarefied intellectual exercise; Stravinsky’s own performance (Columbia MS 6319, ML 5719—tape MQ 481) is a taut, elemental one that bears an impact quite unlike any other. That Sacre can be an emotional experience as well is demonstrated by the Bernstein recording (Columbia MS 6010, ML 5277), an altogether more personal account of the score than the Boulez and Stravinsky performances.

**Tchaikovsky: Piano Concerto No. 1 in B-flat Minor**—The Cliburn-Kondrashin performance continues to be my first choice (RCA Victor LSC/LM 2252—tape FTC 2043) because of its fresh spontaneity. Not far behind, for my taste, are the teams of Rubinstein and Leinsdorf (RCA Victor LSC/LM 2681—tape FTC 2118) and Janis and Menges (Mercury SR 90266, MG 50266).

**Tchaikovsky: The Nutcracker**—The Dorati-London Symphony recording of the complete ballet (Mercury SR 20913, OL 2113—tape ST 20913) is in a class by itself: the sound reproduction is superb, and Dorati delivers one of the finest performances he has ever recorded.

**Tchaikovsky: Serenade for String Orchestra**—New since last year is the performance by Barbirolli and the strings of the London Symphony Orchestra (Angel S 36269, 36269). It is now my preference among the available discs. Of the performances on tape, my choice is Ormandy and the Philadelphia Orchestra (Columbia MQ 431).

**Tchaikovsky: Symphony No. 4 in F Minor**—A new Ormandy recording has been released since last year (Columbia MS 6756, ML 6156), but the razor-sharpness of the Maazel-Vienna Philharmonic performance (London CS 6429, CM 9129—tape L 80161) and of its recorded sound is not eclipsed by the newer disc.

**Tchaikovsky: Symphony No. 5 in F Minor—Ormandy’s** recording (Columbia MS 6109, ML 5135) is still the one I admire most; it is a deeply felt performance superbly played and recorded. Of the available tape versions, and there are seven, I lean toward the somewhat quieter but nonetheless convincing Klemperer account (Angel YS 36502, 3½ ips).

**Tchaikovsky: Symphony No. 6 in B Minor (“Pathétique”)**—There are no new catalog entries since last year to challenge Ormandy’s moving performance (Columbia MS 6160, ML 5495—tape MQ 368).

**Tchaikovsky: Violin Concerto in D**—The new recording by Erick Friedman (RCA Victor LSC/LM 2865) is evidence of the continuing growth of this young artist. My previous recommendations for a recording of this concerto remain unchanged, however: Jascha Heifetz (RCA Victor LSC/LM 2129) for unparalleled virtuosity and Isaac Stern (Columbia MS 6062, ML 5379) for relaxed serenity. Of the current tape versions, I find the elegant and exciting Francescatti-Schippers performance (Columbia MQ 742) most satisfying.

**Vitaldi: The Four Seasons**—Bernstein’s dynamic account (Columbia MS 6744, ML 6114—tape MQ 736) is new since last year, but the version conducted by Max Goberman for the Library of Recorded Masterpieces (available only by subscription) maintains its stylistic supremacy. Another first-class recording is the one by the Solisti di Zagreb, conducted by Antonio Janigro (Vanguard BG 5001, 561—tape C 1611).
The Engineers Have Their Say About

PHONO CARTRIDGES

By HANS H. FANTEL and LARRY KLEIN

Nearly all of today's phono cartridges—even the relatively inexpensive ones—perform at a level of fidelity that was not possible only five or ten years ago—and they are still undergoing improvement. Out of an awareness of certain common problems and issues that are of continuing concern to manufacturers and music listeners, HiFi/Stereo Review arranged a symposium in which major cartridge designers (and our own Julian Hirsch) were asked a number of questions on the present state of the art of phono-cartridge design. We present a digest of the symposium within the framework of these questions, which form the focal points of current thinking among the engineers practicing in this very complex and somewhat controversial field.

- What enables modern cartridges to reach performance standards that were unattainable five years ago? All the experts agree that the main factor in recent progress has been the lowering of the effective mass of the moving parts of the stylus. With a reduction of the stylus mass to 1 milligram or less, modern styli have less inertia. Hence they can accelerate and decelerate faster, and more accurately follow the high-frequency impressions in the record-groove walls. Julian Hirsch also mentions "improvements in the technique of diamond finishing, which permit low-mass, bi-radial (elliptical) styli to be made economically," and Benjamin Bauer of CBS Laboratories similarly credits smaller stylus-tip radii with more accurate high-frequency tracing. Harry A. Pearson of Sonotone, along with Bauer, mentions improved damping of the stylus. Herb Horowitz of Empire points to new magnetic materials as a significant factor, a view shared by Pickering's John Bubbers. "Today's materials, both for the armature and for moving parts, are far lighter and stronger than those available five years ago," says Bubbers. "Besides, we've improved fabricating techniques. A whole new art has grown up around precision manu-

facture and quality control of these miniature parts."

Peter Pritchard of ADC agrees that superior materials are responsible for some of the improvements, but adds that new design concepts have contributed also.

- What are the chief limiting factors on cartridge performance today? How might they be overcome?

Some designers suggest that we are reaching a practical limit of refinement in cartridge design. K. Hagen-Olesen of Ortofon, for example, believes that "with a stylus mass of less than one milligram and stylus forces of two grams or less, we are already close to the point where a record player becomes more like a delicate laboratory instrument than a practical device for home use." Pritchard maintains that the record itself is the area most in need of refinement. Empire's Horowitz agrees and elaborates: "We need greater stiffness in the vinyl material used for records, but this must be done without sacrificing low noise levels in the recording."

Not everyone is quite so content with present-day cartridges. Julian Hirsch, along with the majority of engineers, still sees room for improvement. The way
to achieve it, says Hirsch, is by "still further reduction of moving mass and tracking force. I look forward to the day when tracking at 0.25 gram will be commonplace."

John Wood of Euphonics maintains that further lowering of the mass throughout the cartridge and tone-arm are necessary. Bauer is quite specific about how he expects low-mass moving parts in the cartridge to be achieved in the future: "Aside from using lighter magnetic materials, one might employ improved shank materials with higher strength-to-mass ratios. For example, titanium might be used to good advantage here." In addition, Bauer proposes new design concepts to provide "decoupling action, where the stylus tip mass becomes gradually decoupled from the mass of the shank assembly at high frequencies, say, beyond 15 kHz. I suspect that one might make stylus shanks of some modern plastic like Delrin. These new plastics are light, strong, and possess inherent internal damping not commonly found in metals."

- Do you work with record companies to calibrate or standardize factors other than tracking angle?

On this point reactions ranged from indifference to ill-concealed passion. In one area of standardization there is a technical tug-of-war that keeps cartridge designers and recording companies pulling in opposite directions. The cartridge men would like companies to keep down velocities to the NAB's (National Association of Broadcasters) standard-reference recorded program levels. This would make records relatively easy to trace and minimize distortion. Yet, in efforts to reduce surface noise or to make their records sound louder than those of the competition, the velocities on the discs of some manufacturers rise to peaks of 24 cm/sec—and higher. Even the nimblest stylus has difficulty following such frantic groove wiggles and tends to lose contact with the groove walls at the velocity peaks.

Despite some disagreement, diplomatic relations are maintained between the record companies and cartridge makers. Shure, Empire, Sonotone, Pickering and others participate in the activities of various record-industry committees aimed at setting standards for cutting angles, groove dimensions, equalization, and so forth. Ortofon also supplies cutting heads to a large number of record manufacturers for use in cutting their master discs.

- Do you feel that the main reproduction problems now lie in the high- or the low-frequency areas? What specific factors are most influential in these areas?

It is generally agreed that the low-frequency characteristics of a cartridge are mainly determined by its compliance. Greater compliance allows the stylus to follow the larger excursions of the groove walls that represent low and loud bass notes. Good reproduction of high-frequency notes, by contrast, generally depends on low effective stylus mass. This means low inertia and enables the stylus to follow the rapid zigzag of the groove walls that embody the treble sounds, executing rapid hairpin turns with a minimum of skid or bounce.

Partial dissent is expressed by Ortofon's Hagen-Olesen who holds the view that even in the mid-range and over most of the lower frequencies, stylus mass is the main determinant of cartridge behavior. "Because of lower tip mass, less damping is necessary," he explains. "And the damping force forms the major part of the stylus' mechanical impedance (resistance to movement) at the middle and low frequencies. Therefore, a decrease in damping force means that we can also track the middle and lower frequencies with less stylus force. Compliance is the dominant factor only at the very lowest frequencies."

Irving Fried of IMF, who works with an English-built cartridge, pursues an unorthodox path toward elimination of high-frequency tracing troubles. He states that optimum results are obtained when the conversion from mechanical vibration to electrical signal takes place directly at the stylus tip. In this way he claims to sidestep problems of cantilever resonance and damping that usually intervene between the stylus tip and the signal-generating elements.

Bauer of CBS deplores the fact that some of today's pickups exhibit a 6 to 10 db undamped resonance peak in the area of 12 to 16 kHz. He admits that the audible effect of this is lessened by the high-frequency equalization curve, and it therefore does not pose a major problem with the better cartridges. But he adds: "I hope you will forgive me for being a perfectionist, but I definitely think that here lies an area for future improvement."

- Why is a range of tracking forces specified for each cartridge instead of a specific optimum tracking force?

"Many people favor minimum tracking force in order to minimize record wear," says James Kogen of Shure. Yet he observes that some "loud" records are cut at too high a level to be reproduced at the minimum force. Consequently, the tracking force may have to be increased for these records. "We therefore must specify maximum tracking force to denote the force beyond which the stylus will retract into the housing," Sonotone's Pearson also emphasizes that a suitable range of tracking is needed to accommodate different types of records.

To Empire's Horowitz, tracking-force figures look "like a case of spec-manship. Few cartridges operate well at the low end of their rated range of force. Usually the listener will get the least distortion near the upper limit of the indicated tracking-force range."

A given cartridge in a tone arm with high inertia and bearing friction obviously requires more force to hold it in the groove than when installed in a well-designed low-mass, low-friction arm. And Pickering's Bubbers doesn't trust stylus-pressure gauges: "Most of them are
off by more than a gram—so it is very practical to indicate a permissible range to the user."

- What is your reaction to the statement that cartridge-compliance figures are inaccurate or misleading?

This question triggered some spirited comments about what constitutes the "right" way to measure compliance. Some insisted that compliance should be measured as simple displacement stress under static conditions, while others maintained that it must be measured dynamically with the stylus moving vigorously. This, they contend, corresponds more closely to actual working conditions encountered by the stylus in the record groove.

"Most of the elastomeric materials used to hold the stylus within the cartridge show a decrease in compliance at increasing frequency," says Sonotone's Pearson. "Their compliance also varies according to the amplitude of their motion. When you measure compliance under static conditions, you sometimes get readings 100 per cent higher than under certain dynamic conditions encountered in a record groove." Pearson stresses the fact that Sonotone's measurements represent dynamic data.

Because compliance changes at different frequencies, Fried of IMF feels that it should be presented as a mechanical-impedance curve (plotted against frequency) rather than as a single figure. Horowitz and Kogen suggest that manufacturers should at least make clear whether a given compliance reading represents static or dynamic conditions.

Ortofon's Hagen-Olesen is at loggerheads with all this. While most of his colleagues regard dynamic compliance measurements as more realistic, Hagen-Olesen maintains that "compliance is a static measure and should therefore be taken at zero frequency." Pickering's Bubbers shares this classic pure-physics view. "Compliance is defined as the inverse of the spring constant of the system and hence should be measured statically. All measurements would then be directly comparable and there would be no further need to define standard conditions of measurement." Joseph Grado of Grado Laboratories offers the controversial comment that "a cartridge with a stiffer compliance sometimes tracks better than a high-compliance unit. High compliance may result from sloppy coupling and, when used with a high-mass tip, make the sound hashy or bassy."

Julian Hirsch fails to see much meaning in the whole compliance controversy. He points out that required tracking-force (in a quality tone arm) is an eminently practical index of compliance. "That's all the user needs to know. He shouldn't concern himself about compliance."

- The main quoted specifications for cartridges are frequency response and compliance. What other specifications do you consider significant?

"The most important thing is how it sounds," says Grado. "Lab tests do not always correlate with listening tests. There are instances when a cartridge with poorer specs sounds better than one with superior paper data."

Kogen and Bubbers agree that printed specifications alone do not provide a reliable index of sound quality. "The fact is that no standard measuring techniques are available for many cartridge characteristics," says Kogen. "This creates considerable confusion and sometimes opens the door to dishonesty in specifications. We can vary frequency response and distortion measurements all over the map, depending on what test report we use, what tracking force, record speed, recording level, etc." Bubbers regards stylus mass, damping, and compliance as an indissoluble and interdependent trinity. Hence he feels that separate listing of any of these factors is none too meaningful even to the engineer, let alone the layman. Kogen suggests that a joint measure of these factors might be devised in terms of what he calls "trackability." This would express the ability of the stylus to maintain contact with the groove under any conditions of frequency or recording velocity. "Trackability," says Kogen, "would be a performance measure; compliance and mass are merely design parameters." Fried of IMF agrees with Kogen, and would like to see a mechanical impedance curve presented as part of a cartridge's specifications.

Most experts agree that among the presently established measures, stylus mass is more a determinant of cartridge performance than stylus compliance. Pritchard, Wood, and Bauer emphasize the importance of listing intermodulation and harmonic distortion, along with the more commonly available information.

- How significant do you find tracking angle? Has 15-degree tracking made an audible improvement?

Sorting out the sneers and huzzahs, the testimony was mixed: "I never heard any improvement from a 15-degree stylus" (Empire). "A definite, audible improvement" (Shure). "Nobody really understands it" (Pickering). "A minor matter. Other things are more important" (IMF). "It never hurts to standardize" (Hirsch). "This is one large advertising gimmick" (Grado).

(Continued on page 50)
SKATING AND ANTI-SKATING

One of the current subjects of hi-fi controversy, not only among some cartridge manufacturers but record-player manufacturers as well, is the phenomenon of skating, the tendency of the tone arm and stylus to move toward the center of the record as a result of tone-arm geometry. Julian Hirsch touched upon this subject in his May issue Technical Talk column, and we present below two views on the subject prompted by Mr. Hirsch's discussion.

JULIAN GORSKI
United Audio
New York, New York

The question of the significance of skating is, not surprisingly, of considerable interest to the manufacturers of the Dual record player, since a major feature of the Dual 1019 is its sophisticated anti-skating system. Since its introduction, we have received many questions on this feature, some of which, together with our responses, may be worth bringing to the attention of readers of HiFi/Stereo Review.

Q. How serious is the problem of skating?
A. It is at least as serious as any other factor known to introduce distortion into a high-fidelity system. However, unlike other types of distortion, those from skating result from the physical deflection of the stylus from its center position toward the inner groove wall. As a result, the same amount of excursion is not available to the stylus on each side, which is hardly the most desirable condition for optimum record reproduction. Other factors of longer-range consequence include cumulative stylus fatigue and uneven stylus wear, both affecting record-groove wear.

Q. Is skating a problem affecting all tone arms?
A. No, only with tone arms that are designed and engineered to the highest standards of precision, and with bearing friction low enough to permit them to skate. Since skating force is relatively small (about 12 per cent of the tracking force), the bearing friction found in most tone arms provides an involuntary "anti-skating" force. However, any bearing friction high enough to override the skating force will also have a restrictive effect on lightweight tracking as well.

Dual's Skate-O-Meter measures skating force in milligrams.

Q. Why don't all the better tone arms have anti-skating devices?
A. Some do, but others which once had anti-skating devices proved to be unreliable or caused difficulty in handling the tone arm and were subsequently discontinued. Other reasons have to do with the general lack of objective knowledge about skating, owing partly to the unavailability of instrumentation for obtaining this knowledge.

During the research leading to the development of the Dual 1019's tone arm, Dual found it necessary to design and engineer an entirely new type of instrument, the Skate-O-Meter. This highly sensitive instrument, which can be used on any tone arm, provides the first objective and directly measurable (in milligrams) data on the forces acting upon the stylus during actual play on either test records or normal recorded material. (The grooveless record, although an interesting demonstration device, inadequately represents actual playback conditions.)

The data provided by the Skate-O-Meter relate to skating force, anti-skating force, tone-arm bearing friction, stylus radii, counter-force applied by shut-off mechanisms, and even variations in the elasticity of the materials used in records. With information of this type now made available, much of the mystery (and perhaps resistance) about the question of skating can be lifted.

Q. How should anti-skating be applied?
A. By an equivalent counter-force applied in the same plane as the skating force, but in the opposite direction. This counter-force should be precisely calibrated, easily applied, utterly reliable, and constant over the entire playing area. It should also permit continuously variable adjustment, as skating force varies according to both tracking force and stylus radius.

Q. What effect does the elliptical stylus have on skating force?
A. The elliptical stylus causes more skating force than the conical. Because its tracing radius (generally 0.2 or 0.3 mil) is less than half the 0.7 mil of the typical conical stylus, the elliptical stylus penetrates more deeply into the soft surface of the vinyl. The increased friction thus results in more skating.

Q. Can't the distortion from skating be eliminated simply by increasing tracking force enough to let the stylus make better contact with the outer groove wall?
A. This may relieve the symptom of skating, such as may be observed on the oscilloscope, but doesn't eliminate the essential problem of skating itself: the biased stylus. In fact, by increasing tracking force, even more force is applied against the inner groove wall. And, of course, the total tracking force may then be more than the optimum for the given cartridge.
IN RECORD PLAYERS: TWO VIEWS

EDGAR VILLCHUR
Acoustic Research, Inc.
Cambridge, Massachusetts

It is possible to make a very impressive, if misleading, demonstration of the apparent need for side-thrust compensation, or anti-skating, in a record player. The output of a stereo cartridge playing a test record is displayed on an oscilloscope or monitored through speakers. One channel is badly distorted. Anti-skating force is then applied using some weight or spring device, and the distortion clears up.

There is one step missing from this demonstration. The distortion can be eliminated just as well by increasing the vertical stylus force a little—about 10 to 15 per cent. Or to put it another way, the demonstration requires that the stylus force be carefully adjusted to just below the value at which the cartridge, without anti-skating, will play the test tone without distortion.

To say that anti-skating reduces tracing distortion is inaccurate because the statement is incomplete. The effect of anti-skating is simply this: it reduces the stylus force that is required to play a particular recorded passage without distortion. The amount of stylus-force reduction permitted by anti-skating depends on several elements of stylus and arm design, but is typically in the range of 10 to 15 per cent.

Those who are interested in the theoretical explanation of this conclusion are referred to an article in the October 1962 Journal of the AES by Professor F. V. Hunt of Harvard, "The Rational Design of Phonograph Pickups." Those who are interested in checking it out for themselves can do so quite simply with no special equipment other than a test record, although an oscilloscope connected across the amplifier output is helpful for displaying the waveforms. The HiFi/Stereo Review Model 211 test record (the low-frequency tracing test band) or the CBS STR 111 test record (which includes higher recorded velocities) are suitable.

On a record player with a properly adjusted anti-skating device you increase the stylus force from zero until it just plays the test band without distortion on either channel. Disable the anti-skating; the distortion will reappear on one channel. Then increase the stylus force further, leaving out the anti-skating, until the distortion disappears again. If the cartridge was distortionless at \( \frac{1}{12} \) gram with anti-skating, it will probably require another \( \frac{1}{4} \) to \( \frac{3}{8} \) gram for the same performance without anti-skating.

In short, the beginning and the end of the virtue of anti-skating compensation is that it decreases by a small amount the stylus force required for proper tracing. Hunt's analysis indicates the range of this decrease as between 7 and 19 per cent, the lower figure applying to the better-designed arms of low inertial mass and greater length. Side-thrust compensation does not change the final performance.

I cannot improve on the rigor of Professor Hunt's analysis, but I did confirm it by experiment, using both commercial record players with side-thrust compensation devices, and an AR turntable specially rigged with an anti-skating device (see photo). Stylus force was adjusted in increments of \( \frac{1}{32} \) gram by adding tiny weights to the cartridge shell.

The only potential advantage in reducing stylus force from \( \frac{1}{4} \) gram to \( \frac{3}{8} \) gram is reduction in record wear. However, there is evidence to indicate that once the stylus force is in this low range, permanent deformation (in other words, damage) of the plastic record groove no longer takes place because the elastic limit of the material is not exceeded. This would mean that a 12 1/4 per cent reduction in stylus force brings either a much smaller reduction in record wear, or no significant reduction at all.

The question then becomes whether the inclusion of an anti-skating device is worth it—a question posed more than the point of view of bother when playing records than of cost. (Hunt, incidentally, who feels that some corrective action is warranted, says that most proposed anti-skating devices "have lacked the elegant simplicity which earns universal adoption," but that was in 1962.)

There are tone-arm characteristics relating to minimum distortion and to tracing ability at low stylus forces which are less glamorous than anti-skating, but much more important. One of these is low inertial arm mass, requiring a very light cartridge shell, so that normal record warp has minimum effect in changing the instantaneous force between record and stylus. Another is neutral balance, which keeps vertical stylus force on the record the same no matter what the cartridge height (in some changers the stylus force at the top of a stack of records is increased as much as 50 per cent). A third is the ability to adjust the exact needle-to-pivot length to compensate for varying cartridge mountings; without such an adjustment the tracking error and attendant distortion of some popular cartridge-arm combinations is quadrupled. These are the things that count.

Simplified anti-skating test set-up on the AR turntable.
Is special mounting care necessary with an elliptical-stylus cartridge? Is the improvement obtained minor, major, or illusory?

Stylo is rife once again. Bubbers brands the elliptical stylus as "a questionable solution to a spurious problem." He explains that the whole problem of inner-groove distortion, which the elliptical stylus is supposed to solve, wouldn't have arisen if some of the records weren't cranked up to excessive loudness levels. "But as long as a few recording engineers won't let up on the throttle, I suppose the ellipticals help to a small degree," he admits. ADC's Pritchard agrees and states that "the improvement can be major when playing heavily modulated inner grooves." He goes on to add, however, that if the record companies would compensate for inner-groove distortion in the recording process there would be very little need for elliptical styls.

Sonotone's Pearson sees no merit in the elliptical stylus: "We noticed no improvement, and the extra care required to properly orient it is a definite disadvantage to the user." Wood feels that ellipticals are "worthwhile," but warns that they "must be mounted at the proper angle and used with a low-enough tracking force—under 2 grams—or record damage will result." Kogen and Horowitz agree that "improvement is significant," while Bauer reports that in a series of tests conducted a year ago he found ellipticals "no better, and on the average perhaps a bit worse, than 0.5-mil round stylus." He had better luck with a more recent batch, which yielded better sound. Apparently manufacturing techniques have improved within the last year. He warns, however, that an inexpensive or improperly made elliptical can severely damage records.

Opposed or in favor, most designers agree that the elliptical stylus presents serious problems in quality control, demands complex optical equipment for proper mounting on the shaft, and care in home installation. Improperly produced or installed, it offers no benefit and might cause record damage.

Do you anticipate improvements in the material of which records are made? How would such improvements affect cartridge performance?

Because the mass of the stylus interacts with the elasticity of the record material to form a resonance, the record material has a direct effect on cartridge performance. Hirsch hopes that record makers will use harder substances in the future. This would have the effect of raising the stylus resonance, possibly far beyond the audible range, where it could not cause noticeable response peaks. Locating the stylus response beyond 15 kHz generally contributes toward smoothness of sound and also reduces record wear in the high-frequency region.

Hagen-Olesen points out that harder record materials would permit making stylus assemblies that are more robust and less susceptible to damage from careless handling. Yet Horowitz suspects that record materials will probably be made softer in the future to reduce background noise. "That will make high-frequency reproduction even more difficult," he predicts. Most of the cartridge fraternity is evidently too disillusioned with the record makers to expect much help from them. Only Bubbers, a veteran of the recording studios and a pioneer in stereo recording in this country, acknowledges the vast improvement in record materials over the past decade.

What flaws, if any, do you find in the cartridge tests performed by various consumer testing organizations, including HiFi/Stereo Review?

"My main gripe," says Bubbers of Pickering, "is that the testers rarely specify which test record they use. [HiFi/Stereo Review's] Julian Hirsch does—see, for example, his cartridge test reports in the July 1965 issue. Ed.] Also, they seem to work on the specious assumption that the test record is always right. You can use ten different test records with a given cartridge and get ten different results. It's just one more instance of the ubiquitous engineering problem of finding a valid and reliable primary standard."

Ortofon's Hagen-Olesen suggests a partial solution to this problem: "The actual recorded waveform (including possible overswing on a square wave) should be used as reference so that the cartridge which reproduces a waveform nearest to the recorded one might be considered best." Hagen-Olesen goes on to buttress his argument for visual comparison of the waveform in the record groove with the reproduced waveforms: "If you compare only the reproduced waveforms of different cartridges, the one with the least overswing will seem the best. Yet often there is overswing in the recorded waveform. Hence your conclusion is misleading, because it will favor the cartridge least able to produce the high-frequency overswing."

ADC's Pritchard feels that there is so little difference between the frequency response and separation characteristics of the best cartridges that these characteristics now have much less significance than they did a few years ago. The factors that should be concentrated upon are those that are really responsible for one cartridge's sounding superior to another—namely, distortion characteristics and tracking ability. Horowitz of Empire feels that most independent testers lack intimate knowledge of specific design considerations and are therefore unable to judge such factors as reliability and life span.

Hirsch deplores the lack of "really good, low-distortion musical recordings which can show up the differences between cartridges. Except in a very few recordings, such differences are not audible. This leads me to believe that the distortions in commercial pressings far exceed the distortion levels of the better cartridges."
SUMMER is likely to find you far from your high-fidelity system—perhaps far from any a.c. outlet you could plug it into, even if you had brought it with you. But the vacation months needn't also mean a vacation from good-music listening these days, thanks to the boom in FM broadcasting and in portable FM radios.

The portable radio has always been a favorite vacation accessory. The most compact of the available music-reproduction systems, it is complete in itself: it needs no external power source, no records or tapes to be fed into it. Until recently, however, the battery-powered radio, although the most portable music source, was also the least likely to provide music-listening pleasure, bedevilled as it was by noise, distortion, and a dearth of music worth listening to. It took transistors and the FM broadcasting boom to change all that.

Before transistors, most portable radios had flea-power audio stages and miniature speakers that started distorting the moment the sound rose above the whisper level.

Those hefty sets that had decent sound could be called "portable" only because they were battery powered and had a handle. These days, transistors permit construction of light, compact radios with a respectable watt or two of audio output power—and with far lower battery drain than the low-power tube radios of yore. This not only means longer battery life, but the batteries themselves, instead of the expensive, heavy "packs" of yore, can now be the standard, readily available 1.5-volt types commonly used in flashlights.

The FM boom began soon after World War II, when serious music listeners discovered FM's advantages of wide frequency response, lower noise and distortion, and an almost total absence of static. While the limited audio systems of even the biggest and best of the FM portables cannot take full advantage of FM's fidelity, the decreased background noise and greater clarity are obvious in even the smallest sets. The pocket-size portable, for example, whose speaker would seem to preclude anything resem-
bling hi-fi listening, usually provides FM sound that is clearer and less tiring to listen to than the same programs broadcast simultaneously by the station's AM channel. And if you prefer Rachmaninoff to r&b, FM is indispensable. The AM bands have been largely taken over by country, rock, wall-to-wall mood music, commercials, and news, but FM offers all these (in moderation) plus abundant classical, jazz, and discussion programs.

The FM portables I examined for this vacation-time survey—a select sampling of the possibly several hundred models on the market—range in weight from about 5 ounces to almost 17 pounds and in price from about $25 to $250. Most can receive both FM and AM broadcasts, and many cover marine, aircraft, and various short-wave bands as well. All have earphone jacks for private listening, and many have additional input and output jacks (for tape recording and playback, phonograph inputs, and external speakers), various types of external antennas, and a.c. power supplies (a few of these are built in). There are tone-controls, loudness controls, tuning meters, dial lights, and even, in a few models, motorized automatic tuning with remote control, and multiplex stereo adapters.

The audio systems of these radios vary from that of the pocket-size Sony 2F-23W, with a 0.1-watt "undistorted" audio output and a 1½-inch speaker, to that of the Nordmende Globetraveller, with 2.3 watts of audio output power and a 5 x 9-inch speaker. As shown in the accompanying chart, some radios have separate bass and treble controls, some a single tone-control knob or a "high-low" tone switch, and others no tone control at all.

Features: In selecting a set for vacation or home use, size and weight considerations are good starting points. The smallest and lightest sets (the pocket portables) have the poorest tone quality, but in most metropolitan areas they still pick up better programs, with less interference, than do their AM equivalents. Conversely, the larger sets (which, for the most part, have the best sound) are also the heaviest and most expensive—and part of that expense buys features you may not need, such as short-wave reception.

Many, but not all, FM portables can double as auto-

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**FM PORTABLES: A SELECTIVE SAMPLING**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PRICE</th>
<th>WEIGHT, LB</th>
<th>APPROX. SIZE, INCHES</th>
<th>OUTPUT POWER AS PORTABLE, WATTS</th>
<th>BATTERIES AND TYPE</th>
<th>AC SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blaupunkt Derby</td>
<td>$ 89.95</td>
<td>6</td>
<td>10½x8½x3</td>
<td>1.8</td>
<td>6-D</td>
<td>Avail.</td>
</tr>
<tr>
<td>Blaupunkt Riviera</td>
<td>160.00</td>
<td>10</td>
<td>12½x7½x4</td>
<td>2</td>
<td>6-D</td>
<td>Avail.</td>
</tr>
<tr>
<td>CBS Masterwork 2864</td>
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<td>9x6x3</td>
<td>0.27</td>
<td>4-AA</td>
<td>Built-in</td>
</tr>
<tr>
<td>CBS Masterwork 2866</td>
<td>49.95</td>
<td>6</td>
<td>10x7x3</td>
<td>0.3</td>
<td>4-C</td>
<td>Built-in</td>
</tr>
<tr>
<td>Dynaco Beolit Model 700</td>
<td>119.95</td>
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<td>4½x9½x4</td>
<td>1.3</td>
<td>6-D</td>
<td>—</td>
</tr>
<tr>
<td>Hallicrafters WR-4000</td>
<td>139.95</td>
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<td>4½x11½x8</td>
<td>0.5</td>
<td>8-D</td>
<td>—</td>
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<tr>
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<td>10x8x4</td>
<td>0.25</td>
<td>6-C</td>
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<tr>
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<td>17</td>
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<td>8½x4x2</td>
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<td>4-AA</td>
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<tr>
<td>Hitachi KM-100SC</td>
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<td>0.3</td>
<td>4-C</td>
<td>Avail.</td>
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<tr>
<td>Lafayette Criterion 1</td>
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<td>4-C</td>
<td>Avail.</td>
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<td>Motorola TP11C</td>
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<tr>
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<td>Nordmende Globetraveller</td>
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<td>Norelco L-638</td>
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<td>14½x10½x5</td>
<td>1</td>
<td>6-D</td>
<td>—</td>
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<td>Olson RA-771</td>
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<tr>
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<td>3</td>
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<td>1.7</td>
<td>4-C</td>
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<tr>
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<tr>
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<td>0.3 (each)</td>
<td>3-C (each)</td>
<td>6-D</td>
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<tr>
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<td>13x8½x4</td>
<td>1</td>
<td>6-D</td>
<td>—</td>
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<tr>
<td>Tandberg &quot;Auto&quot;</td>
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<td>Avail.</td>
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<tr>
<td>Telefunken Bajazzo T5 5511</td>
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<tr>
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<td>8x1¾x2</td>
<td>0.5</td>
<td>8-D</td>
<td>—</td>
</tr>
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</table>
Tuning Convenience: A dial light is important if the radio is to be used frequently in dark or dimly-lit places. To save batteries (the bulb itself draws more current than all the transistors in the set), the dial light should have a spring switch that cannot be left on accidentally. Dial lights are but one factor contributing to ease of tuning: the dial scale itself is also important, and the longer and better marked it is, the more easily you can locate your favorite stations. Tuning-knob gearing is important, too: the wider the diameter of the knob and the more turns it must make to tune completely across the dial, the more finely and critically it can be adjusted. This is particularly important if the set covers any of the short-wave bands.

Tuning meters are of some help in locating stations correctly and in orienting antennas, but are even more useful in their other role as battery-condition indicators: it is more than a little annoying to have your batteries start dying audibly just as you've arrived at some remote vacation spot. A good tuning meter should be easy to see and to read and should give some indication even

<table>
<thead>
<tr>
<th>TONE CONTROLS</th>
<th>SPEAKER SIZE, INCHES</th>
<th>TUNING METER</th>
<th>CAR ADAPTER</th>
<th>DIAL LIGHT</th>
<th>LW and/or SW BANDS</th>
<th>MODEL</th>
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<tr>
<td>Bass &amp; Treble</td>
<td>4 x 5/8</td>
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<td>yes</td>
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<td>yes</td>
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<td>7/8</td>
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<td>no</td>
<td>yes</td>
<td>CBS Masterwork 2866</td>
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<td>yes</td>
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<td>Heathkit GR-61 (kit only)</td>
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<td>yes</td>
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<td>yes</td>
<td>yes</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>Switch (each)</td>
<td>4 x 6</td>
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<td>yes</td>
<td>yes</td>
<td>Sony TF-110W &amp; STA-110 Stereo Adapter</td>
</tr>
<tr>
<td>Single knob</td>
<td>3 x 5/8</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>Sony AFM-152</td>
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<tr>
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<td>Tandberg &quot;Auto&quot;</td>
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<tr>
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<td>4</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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</tr>
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</table>
on weak stations. The longer the meter’s scale, the
casier it is to read, and if the radio has a dial light it
is helpful if it illuminates the meter as well.

Automatic frequency control (AFC) is a convenience
for locking in a station, but it is no necessity—save, per-
haps, for automobile operation. None of the sets I
checked showed perceptible drift with the AFC shut
off. Most of the AFC-equipped sets have AFC cut-off
switches for best reception of weak stations whose fre-
cuencies lie near those of stronger ones. With the AFC
on, the radio tends to tune itself away from the weaker
signal to the stronger one.

Some few sets have an automatic tuning function that
searches out the nearest listenable station on the band
each time it is activated. I found this to be a fascinating
feature, but hardly necessary except, perhaps, in automo-
obile use: you can select and accurately tune stations with-
out taking your eyes from the road.

Tone Quality: The only really effective way to judge
a radio’s tone quality is to listen to it. However, in
general (though the correlation is not infallible), the
higher the audio output power and the bigger the
speaker, the better the sound. And the more elaborate
the tone-control facilities, the better chance you have to
shape the sound to your own liking. Although none of
the portables compare in sound quality with component
audio systems, the tone is pleasant in most instances and
very good in a few. Because of the very nature of port-
able, sound has to be a compromise in every case, and
each designer apparently had different ideas as to which
compromise to make. As a result, two radios of similar
overall performance may sound quite different, and you
should select the one whose deficiencies and strong points
are in accord with your own prejudices.

One model, for example, may sacrifice some treble
response to minimize noise, or some bass response in
order to get higher undistorted output from a limited
amplifier and speaker. You may prefer the warmth and
fullness of a slightly “hiss-y” sounding radio to the
clarity of one with more emphasis of the treble. Only by
comparing several radios (one at a time) tuned to the
same station can you tell which one best suits your ears.
Try to find the type of program you listen to most often,
and make sure that any radio whose sound is not up to
that of its competitors in the same price range is not just
suffering from worn-out batteries. Listen to a few male
speaking voices and a symphonic program to determine
the overall balance and clarity of sound, adjusting the
tone controls until the radio sounds best to you.

Unless you will be doing most of your listening in
very quiet surroundings or with an earphone, adequate
volume without excessive distortion is essential. To
check this, tune in a strong station, turn the volume up
until it starts to distort objectionably, then turn the vol-
ume back down again until the distortion is unobtrusive.

Repeat this check with a weaker station, noting not only
comparative volumes, but the amount of hiss heard with
each set. Some sets have a scratchy quality in the treble
(caused by transistor circuit problems and aggravated
by plastic cabinets, tiny speakers, and FM’s wide fre-
cuency range), and particular attention should be paid
to this to avoid overlooking high-frequency distortions
that will later become irritating. Of the sets I checked,
the two Telefunkens, the Tandberg, the Sony 152, the
Noreico L-658, the Nordmende Globetraveller, and the
Blaupunkt Riviera were particular standouts for overall
high sonic quality.

Tuning Tests: Tune the radio to various stations. Sta-
tions should be easy to locate on the dial and easy to
tune in accurately, even with the AFC turned off. See
if the tuning meter gives you truly helpful indications.
Watch out for stations that come in at several places
on the dial, overlapping of stations, inaccurate dial cali-
bration, and noise. Check for sensitivity by tuning in a
very weak station on each of the radios you are consid-
ering—they must be compared at the same time and in
the same place.

Physical Comparisons: Pick up the radio and check
how the handle fits the hand, whether the weight and
balance feel right to you (the less you intend to carry
the radio, the heavier it can be). Check the battery
compartment: batteries preferably should be housed
away from the radio’s wiring and parts so that these will
not be damaged if the batteries leak. Some battery com-
partments open with a catch, others with coin-slot screws.
The catch is more convenient, but the screws may be
safer if you have inquisitive children. Screws should be
of the captive type so that they will not drop on the
floor when the battery case is opened.

In the course of your shopping you will no doubt come
across a number of sets that are not included in this sur-
vey. The sheer number of the FM portables available pre-
cluded any attempt to be definitive in coverage. Further-
more, the bulk of the low-cost house-brand FM radios
are Japanese imports, many of them models that appear
and then disappear from the market with disconcerting
rapidity. I have therefore concentrated in my sampling
on those sets of good to excellent quality that I know
will be around for a while. In the case of a name-brand
manufacturer with more than two models currently avail-
able, I have chosen to list the two that appear to have
the most significant features for music listening, su-
perior tone, or offer the best overall value. The buying
guidelines offered above, however, will be useful aids
in evaluating any FM portable.

Bennett Evans, an audio enthusiast of long standing, is a fre-
quent contributor on technical subjects—most recently the com-
prehensive article on stereo headphones in the November issue.
MADELEINE GREY'S SONGS OF THE AUVERGNE

Canteloube folk songs now available in Angel's "Great Recordings of the Century" series

In and out of the catalog for more than thirty years, the elusive voice but very real vocal art of Madeleine Grey has now been captured in a recorded format more comprehensive and meaningful than any of her previous appearances on disc: Angel's new Great Recordings of the Century reissue of her Canteloube Songs of the Auvergne and Ravel Chants Hébraïques and Chansons Madécasses. Let us hope that it will be more enduring as well.

Madeleine Grey, who retired in 1952 after more than thirty years of concertizing, was a singer of rare versatility and individuality. Contemporary French music was her specialty (also songs from distant lands, and by such composers as Bartók and Villa-Lobos, long before they became fashionable), and her repertoire was not the kind that would normally attract an international following. That she managed, nevertheless, to do just that is due to a group of pioneering recordings which are now brought together on one disc for the first time. It is an historic recording in the best sense of the term, for it documents original interpretations that decisively influenced the future course of the interesting musical works presented on this disc.

Madeleine Grey was the virtual discoverer and leading propagator of Joseph Canteloube's settings of the Auvergne folk songs. The French composer Canteloube (1879-1957) studied composition with Vincent d'Indy in Paris, and, like Bartók, Kodály, Vaughan Williams, and many other composers of the twentieth century, delved into the study of folk song for what it might contribute to original composition. The products of such researches have a way of exceeding expectations, and Canteloube spent much of the remainder of his long life collecting folk songs, particularly in the Haute-Auvergne of South-central France, lecturing on the subject, and writing the exquisite arrangements of the songs for which he is best remembered today. International acceptance of the songs may be dated from the appearance of Grey's first recordings (1930). Since then, other sopranos have helped to establish these colorful and evocative songs in the repertoire and have, in fact, recorded more of them than the dozen contained in Madeleine Grey's originals. Enhanced by richer orchestral sound and superior technical reproduction, the newer renditions of Netania Davrath and Anna Moffo perhaps surpass those of the French artist in tonal sheen, but not in temperamental affinity nor spontaneity of expression. But let no one think that it is mere authenticity that makes the Grey interpretations unique: she was also an entirely captivating vocalist.

Grey considered herself, in her own designation, "theAmbassa
dress of the music of Ravel." After his death, she wrote in 1952: "I carried on, with even more fidelity and ardor. . . . Without vanity, but with a proper pride, I can say that from the moment when I gave the Hébraïques their first hearing, I was Ravel's interpreter." She was the first interpreter of the Chansons Madécasses as well as the Chants...
HYDRAULIC INTERPRETATIONS OF CHOPIN NOCTURNES

Ivan Moravec's reading of the complete Nocturnes stunningly recorded by Connoisseur Society

Of the many different forms Chopin chose to write in—mazurkas, études, waltzes, preludes, scherzos, ballades, and so on—the Nocturnes are clearly among the most difficult to perform as an integral unit. This is partly because many of them are so familiar that they can be cloying unless the player resorts to individualistic turns of expression, and then one is faced with the contingency of exaggeration. Most of them are not difficult in the technical sense, but to sustain the mood that Chopin intended is a formidable task indeed. For this reason, few of the by now considerable number of recordings of these pieces, complete or nearly so, are uniformly successful.

The younger generation of pianists, being somewhat removed from the Romantic heritage of the past, are particularly unable to recapture the slightly perfumed, nostalgic, and atmospheric sentiment of the Nocturnes, and even among the older generation there was still the temptation, on the part of many a keyboard giant, to use the occasionally turbulent middle sections of these pieces as an excuse for displaying finger dexterity. I have treasured Lipatti's recording of Op. 27, No. 2, the several Nocturnes recorded at different times by Cortot, and more recently the few done on different recital discs by Ashkenazy. Yet, had they recorded a complete set, I wonder whether even these magnificent performers would have been consistently successful.

Such a preamble is necessary to emphasize the rare pleasure I have received from Connoisseur Society's new recording of the nineteen Chopin Nocturnes by the Czech pianist Ivan Moravec. These are not the sort of pieces one normally enjoys listening to more than one side at a time; yet, repeatedly, I have listened to an entire disc with unflagging attention. Moravec invariably captures the ideal mood, sustains it to the end of each Nocturne, and then, as though a new tale were about to unfold, begins again. The listener is helpless under such persuasion. The pianist, furthermore, doesn't indulge in any eccentricities, any interpretive quirks in an attempt to make a particular old favorite seem new. The music just appears new, almost as though it were improvised, and the artist's technique does not obtrude, but provides a statement of the text that is effortless and simplicity itself. Not all is placid, however, and Chopin's turbulence is strongly felt, but never bombastically. Perhaps the best words of description for the general quality of playing to be heard here are gentle sentiment (not sentimentality), limpid repose, and perfect intimacy. The Nocturnes need no more.

Moravec's superb tone, his sensitive pedaling, and his enormous range of dynamics have been stunningly captured by Connoisseur Society in what I must consider one of the most outstandingly beautiful examples of piano reproduction I have ever heard. The two discs, incidentally, are available only at 33½ rpm, rather than the Society's accustomed 45 rpm, presumably for reasons of timing.

CONNOISSEUR SOCIETY CS 1065/1165 two discs $5.79 each, CM 1065/1165* $4.79 each.
THE INDISPENSABLE BILLIE HOLIDAY

Columbia's second "Golden Years" album is a reminder of what constitutes superior jazz singing

COLUMBIA'S new "Billie Holiday: The Golden Years, Volume II" follows the equally indispensable first volume on Columbia (C3L-21). The recordings here were made from 1935 to 1942 and include many of her more notable sessions with various Teddy Wilson-led combos and later with small pick-up orchestras of her own. For those who collected these sides as they were issued, this set will provide a way of giving some rest to the original 78's. The quality of sound, however, does not have the fullness of body that characterized most of those Brunswick, Vocalion, and Okeh records. Why this is so I am not enough of an engineer to tell. In any case, the sound on these three discs is certainly acceptable.

Those long since converted to the uncommon vocal impact of Billie Holiday will need no further explication of the virtues of these performances. Younger listeners, however, may find here a new set of criteria as to what constitutes superior jazz singing. It is not enough to point out that Billie Holiday took an instrumentalized approach to singing; her phrasing, the plasticity of her beat, and her way of sliding through textural changes resembled those of an unusually resilient and emotionally perceptive hornman. But she was also very much concerned with lyrics, unlike some aspiring vocalists who think that sounding and swinging like a horn is enough to make them authentic jazz singers.

Only Carmen McRae today comes close to Billie Holiday's capacity to make lyrics—even ordinary lyrics, as is the case with many of these songs—tell a wholly believable and often deeply affecting story. As Leonard Feather observes in his notes, just fifteen of the forty-eight songs here were standards at the time they were recorded. The rest were new, and since Billie was not considered especially "commercial" by record companies, "most of the tunes were current Tin Pan Alley products that hadn't quite made the grade."

But all songs were a challenge to her, both in terms of how she could paraphrase and personalize their melodies and also how well she could make the words work for her way of viewing life and love. Accordingly, such tunes as It's Too Hot for Words, I Hear Music, and What a Night, What a Moon, What a Girl survive in jazz only because Billie Holiday recorded them. There are also uniquely vivid Holiday interpretations of such more familiar songs as My Man, Sugar, and More Than You Know.

This collection should serve to demythologize part of the Holiday musical reputation. Those who came late to her singing tend to regard her primarily as a singer of loss and loneliness. But, as Feather observes, by far the majority of the songs that span the seven years of this volume are light-hearted. And she was just as convincing in setting moods of gaiety, exultation, and carefree mockery as she was in taking possession of moody ballads and the infrequent blues she sang.

In addition to the delightful singing, there are here solos by many of the major instrumental figures of the swing era: tenor saxophonists Lester Young and Ben Webster, alto saxophonists Benny Carter and Johnny Hodges, trumpeters Roy Eldridge, Buck Clayton, and "Hot Lips" Page, trombonists Dickie Wells and Benny Morton, and the crystalline, precisely graceful piano of Teddy Wilson.

The boxed set contains a knowledgeable essay by Leonard Feather and full discographical data. My one objection is that in view of Miss Holiday's beauty—as haunting as her voice—Philip Hays' cover sketch of her is, to say the least, misleading.

Nat Hentoff

® BILLIE HOLIDAY: The Golden Years/Volume II. Billie Holiday (vocals) and various instrumental groups led by Teddy Wilson and Miss Holiday, You Let Me Down: He's Funny That Way; Solitude: Mandy Is Two; and forty-two others. Columbia C3L 40 three discs, boxed $11.39.
FIRST COMPLETE RECORDING OF SHAW’S SAINT JOAN

A glittering cast under director Howard Sackler makes the most of an eloquent script

G e o r g e  B e r n a r d  S h a w wrote his play about Joan of Arc at the time she was canonized by the Catholic Church in 1921. The church granted her sainthood and immortality; the playwright restored her to humanity. "We may accept and admire Joan," he wrote in his preface to the play, "as a sane and shrewd country girl of extraordinary strength of mind and hardness of body. Everything she did was thoroughly calculated; and though the process was so rapid that she was hardly conscious of it, and ascribed it all to her voices, she was a woman of policy and not of blind impulse.” On stage, she is a sassy, sober girl, insolent, practical, and stubborn. When she leads the French forces to raise the siege of Orleans and save the power of the self-pitying, weak Dauphin, she shows herself as a shrewd politician and plucky soldier, eager for battle and revenge against the English. As a Shavian heroine, she is neither romantic nor sentimental. And perhaps because of the author’s lifelong quarrel with Shakespeare, whose Joan in Henry VI, Part One is a witch and promiscuous wanton, Shaw’s Joan is sexless. Yet she’s tremendously human and vital.

As the action moves from the scenes of military victory to the court where her inquisitors doom her to burn at the stake, the deep nature of the tragedy becomes clear: Joan’s quarrel is not just with the English but with all the forces of reaction and oppression. Her war is the war of the individual genius against the established order. She does not seek martyrdom; she is willing to confess anything rather than be tortured and kept behind bars. She cannot understand the obtuseness of her judges nor the treachery of her own voices which have assured her she will be released. She resinds her confession only when she learns that she is to be shut away "from the light of the sky and the sight of the fields and flowers.” The stake is preferable to confinement. Shaw’s judges are not drawn as fools; they are shown as rational men by the light of their own principles—never monsters. Indeed, all the characters who flank Joan in the play are believable people rather than cardboard mouthpieces as in lesser historical dramas. This makes every role in St. Joan a prize for an actor.

The new Caedmon Theatre Recording Society release is the first recorded version of the complete play, and a glittering cast makes the most of every opportunity. If Siobhan McKenna’s Joan seems more a maid of Kilkenny than Orleans, she is on her own terms precisely the coxer and the hustler, the born boss at ease among all classes, that Shaw intended. If anything, she surpasses her own fierce Joan of the prize-winning 1956 New York Phoenix Theatre production. Sackler, as usual, makes all move with the precision and flow of music, weaving voices of varying pitch and weight to save the texture of a wordy script from the slightest monotony. The high treble of Robert Stephen’s petulant, spoiled Dauphin contrasts superbly with the serene eloquence of Jeremy Brett’s Dunois, the good-natured and capable commander whom Joan urges to action against the British. Sir Felix Aylmer’s righteous Bishop of Beauvais, Donald Pleasence’s authoritarian Inquisitor, and Nigel Davenport’s expansive but businesslike Warwick offer model examples in the art of turning set speeches into the explosive stuff of tingling theater. Accompanying the records is enough material to supply a conscientious student with the makings of a Ph.D. on the subject: the playwright’s whole lengthy preface, a complete text, a solemn analysis by Eric Bentley, and photos of just about every heroine who ever played the title role—Winifred Lenihan, Dame Sybil Thorndike, Katharine Cornell, and Uta Hagen among them.

Paul Kress

© © GEORGE BERNARD SHAW; Saint Joan, Siobhan McKenna, Donald Pleasence, Felix Aylmer, Robert Stephens, Jeremy Brett, Alec McCowen, Nigel Davenport, others. Howard Sackler, director. CAEDMON THEATRE RECORDING SOCIETY 311 four discs stereo or mono $23.80.

Siobhan McKenna
A Kilkenny Joan precisely as Shaw intended
The new KLH Model Twelve is the result of some pointed questions about what kind of improvements might go into a speaker system designed for perfectionists.

The KLH Model Twelve is the finest moving-coil loudspeaker we have ever made. Not by a spectacular margin (there just isn’t that much room for improvement in today’s best speakers), but by some important degrees.

Before we began to design the Model Twelve, we asked ourselves some pointed questions. We knew we would not be willing to settle for just a set of more impressive measurements. What real improvements could we conceive of for a speaker designed unabashedly for perfectionists? Which of the improvements that we could make on paper would, in fact, be audible and meaningful? Above all, how could we design a speaker that would be useful under the widest range of conditions?

A few answers

We decided that there were a few absolute factors we could improve upon or change significantly in a system for the perfectionist. We could supply a bit more response at extremely low frequencies. We could offer the potential for more very-high-frequency response—for use only with exceptionally good program material. We could make the overall impedance of the system eight ohms for optimum performance with today’s transistor amplifiers.

By using an acoustic-suspension enclosure slightly larger than usual, we could also provide a bit more speaker efficiency. The amount we could gain would be just enough to allow the listener a choice of many excellent amplifiers of less than super-power.

A final step

With the aim of usefulness uppermost in mind, what else could we do?

We could offer the listener the opportunity to make adjustments in the speaker’s overall sound quality—subtle but important adjustments. Adjustments that would allow the listener to modify the speaker’s musical balance to account for differences in program material, associated equipment, room acoustics, and personal musical judgments. Instead of the usual mid-range or “brilliance” controls, we could provide the listener, for the first time, with an effective way to tailor the speaker to his own needs.

This is why the Model Twelve comes with a unique series of four multi-position control switches. These adjust the level of broad segments of the frequency range: 300-800 cps; 800-2500 cps; 2500-7000 cps; and 7000-20,000 cps. They are housed in a remote switchbox (connected to the speaker by a thin four-conductor cable) that can be placed next to your favorite seat for maximum effectiveness and ease of use. The amount of adjustment from each switch is limited so that you can make only meaningful adjustments. The Model Twelve cannot be made to sound bad under any conditions. It can only be made better for your own requirements.

Perfectionist’s speaker system

We think our approach to the Model Twelve makes sense only for a perfectionist’s speaker system. And the Model Twelve is just that. It will reproduce the highest and the lowest frequencies of any conceivable musical interest. Its very-high-frequency capabilities are actually in advance of most of today’s program material; as the noise content drops on future recordings, the 7000-20,000 cps control can be turned up for ever more realistic music reproduction.

The Model Twelve’s four speakers are used conservatively (in a three-way design) to cover a range at least an octave short of their upper and/or lower limits. The mid-range drivers are housed in special sub-enclosures that are acoustic-suspension in principle. The cabinet is made of one-inch plywood, with quarter-sliced walnut veneer selected for beauty and uniformity of grain. The overall design of the 2" x 22½" x 15" enclosure has been understated to make the cabinet as unobtrusive as possible in any room.

We believe we have done everything we can to make the Model Twelve the best moving-coil speaker system we have ever made. If you are an unabashed perfectionist, you should go hear the Twelve. It will be at your KLH Dealer soon. For more information, write: KLH, 30 Cross Street, Cambridge, Mass. 02139, Dept. 700.

*A trademark of KLH Research and Development Corp.
Ludwig van Beethoven and his brother, a businessman, were rarely on good terms. One New Year's Day, Johann sent a card to Ludwig and, because he had just bought a piece of land, boastfully signed it: Johann van Beethoven, landowner! On receiving it the great composer furiously sent it back, with the following scrawled across its face: Ludwig had just bought a piece of land, On New Year's Day, Johann sent in gushing it the great composer furiously to Beethoven, because he scrawled across its face: Ludwig had just bought a piece of land, Overture! On recollecting it carefully signed it: Johann von Beethoven, brain owner! The most trusted name in sound.
When it comes to piano performances of this greatest of the Bach keyboard concertos, the standard for me is still the pre-war reading by Edwin Fischer, now available in Angel's excellent Great Recordings of the Century reprocessing. Ashkenazy's way with this music is somewhat more flexible rhythmically and more softly contoured in its phrasing. Yet it adds up to a quite convincing interpretation on these terms.

The youthful Chopin concerto, of course, is right up Mr. Ashkenazy's alley. As in his treatment of the Chopin Ballades, in the F Minor Concerto he stresses lyricism and ornamental detail to a greater extent than his chief competitor, Artur Rubinstein, who revels in the zestful and dramatic aspects of the work. One cannot state a final preference here, except in matters of personal taste—and for me there is ample room both in my library and listening taste for Ashkenazy's way and Rubinstein's way.

Conductor David Zimman's name is new to me; but he comes through with a solid (if not overly stylish) accompaniment in Bach and a wholly excellent one in Chopin. On both sides of the disc the recorded sound is full and lustrous, with fine stereo spread and sharp focus when needed.  

**Explanation of symbols:**
- = stereophonic recording
- = monophonic recording
  = mono or stereo version not received for review

**RECORDING OF SPECIAL MERIT**
- **BACH:** St. John Passion. Agnes Giebel (soprano); Wilhelmine Mathias (contralto); Richard Lewis (tenor); Heinz Rehfuss (bass). The Bach Chorus; Orchestra of the Amsterdam Philharmonic Society, André Vandernoot cond. NONESUCH HC 73004 three discs $7.50, HC 3004® $7.50.

**Performance:** First-rate
**Recording:** Very good
**Stereo Quality:** Widespread

This is a lucid, sensibly paced, and very moving performance. Vandernoot maintains a devotional atmosphere throughout, but the dramatic elements are not slighted. And since most of the tension occurs in the choral sections, he creates a foreboding effect in such episodes as "Bist du nicht" (No. 17), "Wir lieben dich" (No. 23), and "Lasset uns den nicht zerteilen" (No. 54). The sonority and discipline of the chorus are special treats; the orchestra, if not of virtuoso caliber, is highly creditable.

Agnes Giebel and Heinz Rehfuss are above criticism here. The latter manages to lend a different tonal shading to the bass arias from the properly lofty tone quality given to Jesus' utterances—a tour de force carried out with unusual skill. Richard Lewis is a moving and eloquent Evangelist whose occasional tonal unsteadiness is outweighed by his mastery of style and meaningful projection. Wilhelmine Mathies displays some breathiness in the initial sections, but she handles the important "Es ist vollbracht" with rich tone, firm intonation, and accurate articulation. She omits all trills, however, a habit shared on occasion by her colleagues as well.

Clear and spacious recorded sound and highly informative liner notes by Joseph Braunstein place this attractively priced package among the most desirable versions of the St. John Passion.  

**BARTÔK:** Sonatas No. 1 and No. 2 for Violin and Piano. André Geertler (violin), Edith Farnadi (piano). WESTMINSTER 17098 $4.79, XWN 19098 $4.79.

**Performance:** Musicianly
**Recording:** Good
**Stereo Quality:** Good

At the risk of seeming impossible to please, I am compelled to suggest that where Victor's recent Hyman Bruss-Charles Reiner recording of these Bartók violin sonatas erred in the direction of rhapsodic excess, Westminster's new recording of the same pieces with André Geertler and Edith Farnadi is more attuned and dutiful than it is either eloquent or terribly meaningful. There is a nice, musically attentive attention to detail on the new disc and an extremely lucid interpretive appraisal of the music's contructional processes. But that intangible "something" that, in an ideal
The Devil and Bruno Walter.
For Bruno Walter, a child of the nineteenth century, the twentieth-century science of making records held an enduring fascination. “The chance to listen again—at a time and place far removed from the excitement of the musical event itself—is a great contribution from recording,” he stated, “and we owe it to the engineer.”

Dr. Walter smiled as he said this, remembering his lifelong hatred of mechanical precision and its servant, the machine. “We owe it,” he added, “to a devil—the devil of technique, which in this case has a kind of angelic message to tell us.”

Yet he was this devil’s advocate. As one Columbia Records producer recalls, “While recording, Bruno Walter’s preliminary warm-up session was enough to leave everybody limp on the floor. He had boundless energy, an incredible memory, and was extremely self-demanding.”

Dressed in a traditional black silk conductor’s jacket, he cut a distinguished figure as he worked, warmly addressing the musicians as “my dear friends” and never raising his soft-spoken voice. During the playback of a take, he listened mentally and physically—smiling, closing his eyes, beating time with his ever-present cheese sandwich. Here was the music of the masters, captured by science for posterity. Here was his music, his raison d’être.

“My life is blessed and made happy by music,” he wrote. And for more than 65 years before the public, Bruno Walter shared this joy with the world at large. He was especially devoted to the music of Brahms and Wagner, the composers of his childhood; the Viennese tradition of Haydn, Mozart, Beethoven and Schubert; the works of Bruckner, whom he knew; and of Mahler, his mentor. “He lived by the truths he found in music,” says his close friend Goddard Lieberson. “It was his religion, his way of life.”

Despite the fact that he was born in Germany, in spirit Walter was a true Viennese. “When I came to Vienna for the first time,” he wrote, “it was like coming home.” His music-making, although highly literal in interpretation, always retained some of the old-fashioned Gemütlichkeit of old Austria. His approach was not sentimental, but full of sentiment. And his performances were like the finest old-world craftsmanship.

Columbia Records honors Bruno Walter on the 90th anniversary of his birth. In the words of Leonard Bernstein, “Bruno Walter was one of the saints of music—a man all kindness and warmth, goodness and devotion.”

We are proud to offer his rich recorded legacy.
The recording here is 1961 vintage, with a little too much dual perspective between piano and orchestra in the Beethoven, but better integrated in the lovely Mozart rondos.

Annie Fischer is heard to best advantage throughout the wonderful slow movement of the Beethoven, where she and the late Ferenc Fricsay let the music breathe in a manner both natural and wonderfully communicative.

However (as of 1961), it is in Mozart that Miss Fischer is most in her element, bringing to these far-from-inconsequential ronds a combination of surging rhythmic pulse and lyrical song that is part and parcel of Mozart style at its finest, and happily, Fricsay is with her all the way. So, too, is the engineering staff, which has chosen rightly to treat the ronds as integrated chamber works rather than as piano-orchestra dialogues. D. H.

BOCcherini: Quintet No. 2, in C Major.

Each of the two quintets has a movement that stands out. In Op. 13, No. 5, it is the celebrated minuet, usually heard out of context. In the C Major work, one of six quintets with guitar, the unusual portion is the finale, a set of variations on a military reprise theme, in which the bugle call approaches through the streets of Madrid and then gradually dies away again. Complete with drum effects, it's an utterly fascinating movement.

Alexander Schneider and his colleagues perform both works with a great deal of vigor and enthusiasm, and the interpretations, on the whole, are very commendable for these qualities. There are some stylistic failings, primarily having to do with ornaments and the lack of eighteenth-century phrasing techniques. One misses some degree of elegance, and, in fact, some sections (such as the opening of the guitar quintet) appear to me to be altogether aggressive in tone. The overall playing of the ensemble (in spite of occasional gypsy-like excursions by Schneider) is precise and very well balanced, but Alirio Díaz's contribution on the guitar seemed to me somewhat lacking in personality. The recording, both in mono and stereo, is in every way excellent. I. K.
BRAHMS: Variations on an Original Theme, Op. 21, No. 1; Variations in F-sharp Minor, Op. 9; Intermezzi and Rhapsody, Op. 119: No. 1, in B Minor; No. 2, in E Minor; No. 3, in C Major; No. 4 (Rhapsody), in E-flat; Beveridge Webster (piano). DOVER HCR ST 7005 $2.00, HCR 5250 $2.00.

Performance: Exemplary
Recording: Good
Stereo Quality: OK

There is no lack of good Brahms solo piano music on discs, and the regular-priced London recordings of Katchen, plus the two Vox Boxes of Klien, offer substantial competition to Beveridge Webster's disc, even at the $2 price. Nevertheless, even taking into account my discomfort at his stop-and-go reading of the celebrated C Major Intermezzo, this offering represents a first-rate buy. All the other items on the program are played in marvellously warm and idiomatic fashion, full of strength and expressiveness even in the sometimes gnarled variation episodes.

If you want your keyboard Brahms in bits and pieces rather than all at once at a budget price, you can't go wrong here. Good sound all the way.

D.H.

RECORDING OF SPECIAL MERIT

BRUCKNER: Symphony No. 9, in D Minor; Te Deum. Berlin Philharmonic Orchestra; Maria Stader (soprano); Siegfried Wagner (alto); Ernst Haefliger (tenor); Peter Lagger (bass); Berlin Opera Chorus. Eugen Jochum cond. DEUTSCHE GRAMMOPHON SLP 139117/18 two discs $11.58, LPM 59117/18* $11.58.

Performance: Lyrical
Recording: Good but low-level
Stereo Quality: Excellent

Old Bruckner and Eugen Jochum treats the apocalyptic Ninth Symphony, in this new stereo-recorded performance, as a seraphic song rather than as massive cyclopean architecture; and, in so doing, he gives us yet another insight into this fascinating unfinished work of Anton Bruckner's old age. In this reading, more than in any other yet recorded, we feel the kinship to Wagner's Parsifal—especially to the somber Act III Prelude.

The Berlin Philharmonic's playing here is a paragon of beauty, as is the recorded sound, save for the prevailing low volume level which seems to be something of a DGG trademark. It is interesting to note, by the way, that though Jochum's slow movement is taken at the same leisurely tempo as Zubin Mehta's on the recent London recording, there is no sense of lugubris. This may well be because Jochum takes care not to exaggerate dynamics, while at the same time sustaining inner and outer melodic lines both in terms of vertical balance and horizontal tension.

Jochum's treatment of the massive Te Deum comes as something of a surprise here, in that his tempos are prevailingly brisk. However, the overall effect is most impressive, helped to no little degree by the beautiful recorded sound. This is the first stereo recording of the Te Deum generally available through domestic channels. This DGG set is a fine one, though perhaps not for the economy-minded who may realize that the Symphony could be accom-

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for von Karajan, Sibelius and the Berlin Philharmonic

Last year, Herbert von Karajan and the Berlin Philharmonic scored a critical triumph with their recording of the Sibelius Fifth. Now, from Deutsche Grammophon comes the new album worthy to stand alongside it.

SIBELIUS: SYMPHONY NO. 4 IN A MINOR AND THE SWAN OF TUONELA. Berlin Philharmonic/Herbert von Karajan. 18 974; Stereo 138 974

ALSO

An exciting successor to Jochum's much-praised performance of the Bruckner 8th Symphony.

BRUCKNER: SYMPHONY NO. 9 IN D MINOR AND THE SWAN OF TUONELA. Maria Stader, Ernst Haefliger, others; Chorus of the German Opera/Berlin; Wolfgang Meyer, organ; Berlin Philharmonic/ Eugen Jochum (boxed two-record set) 39 117/118; Stereo 139 117/118

GOUNOD: MESS DE SOLENELE STE. CAECILIA: Irmgard Seefried; Gerhard Stolze; Hermann Uhde; Czech Philharmonic Chorus and Orchestra/Igor Markevitch. 39 111; Stereo 139 111

SCHUMANN: SONGS ON HEINE POEMS. Dietrich Fischer-Dieskau, Baritone; Joerg Demus, piano (with leaflet) 39 110; Stereo 139 110

CHOPIN: 17 WALTZES. Tamas Vasary, Piano. 19 485; Stereo 136 485

BEETHOVEN: PIANO SONATAS Nos. 4, 9, 10. Wilhelm Kempff, Piano 18 938; Stereo 138 938

Free on request! The new DGG/Archive Illustrated catalogs. Write: MGM Records, Classical Division, 1540 Broadway, New York, N.Y. 10036.

Yet, I must emphasize that the performances are far more than competent, and lack only the final degree of interpretive refinement to be ideally satisfying. Decca's reproduction cannot be faulted.

I. K.

JANÁČEK: Slavonic Mass. Libuse Domaninska (soprano), Vera Soukupova (mezzo-soprano), Beno Blachut (tenor). Eduard Haken (bass); Jaroslav Vodrážka (organ); Czech Singers' Chorus; Czech Philharmonic Orchestra, Karel Ancerl cond. PARLIAMENT PLPS 617 2$9.8, PLP 617* $1.98.

Performance: Authentic
Recording: Very good
Stereo Quality: Good

Thanks to two brilliant recordings which arrived on the scene almost simultaneously last year—versions conducted by Kubelik (Deutsche Grammophon) and Bernstein (Columbia)—Janáček's Slavonic Mass is no longer an unfamiliar work requiring extensive introductory comments. The traditional Latin text of the Mass is supplanted by an early Slavonic (Glagolitic) setting, but the simple religious sentiments conveyed by the text are entirely overpowered by the strength, intensity, and blazing color of Janáček's music.

Heard alongside the widely acclaimed Kubelik version (which received even more critical praise than Bernstein's), the present recording stands up remarkably well. There are moments, in fact, when Ancerl's more rugged and angular performance seems to do more for Janáček's elemental music than Kubelik's tightly controlled and more refined execution. Certainly, the Czech chorus and orchestra, as well as organist Vodrážka, give an excellent account of this music. As for the solo vocal parts—which are not extensive but extremely difficult—Kubelik's singers are definitely superior. Ancerl's soprano and tenor, in particular, are very often effortless and harsh-sounding.

Parliament's sound is amply resonant, and these surfaces are smooth. The uneven lengths of the Mass' eight sections present something of a problem, which causes the Credo (Part IV) in this performance to be split between the two sides. Although the break occurs at a logical spot in the score, the technical execution is not smooth enough to avoid a noticeable break in continuity.

G. J.

RECORDING OF SPECIAL MERIT

LORTZING: Undine (highlights). Lisa Otto (soprano), Undine; Rudolf Schock (tenor); Gottlob Frick (bass); Kühleborn; Ursula Schirrmacher (soprano), Bertalda; Ferry Gruber (tenor), Veit; Benno Kuschel (bass), Hans, Chorus of the Deutsche Oper, Berlin; Berlin Symphony Orchestra, Wilhelm Schüchter cond. EURO DISC S 70729 KR $5.98.

Performance: Very good
Recording: Very good
Stereo Quality: Good

With this entertaining, expertly turned-out Undine sequence added to previous recordings of Der Wegemensch and Zarentzimmern, the three best-known scores of the prolific Albert Lortzing are now suitably represented in the catalog. Like the others, (Continued on page 68)
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FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
Handsome Mort. Loritz's idiom, how plains his enormous popularity in Germany. Invention, high craftmanship, and fluent (if frequently banal) melodic gifts. Musically influenced by Weber and Rossini in equal measure, the opera derives from the same folk tale that inspired Dvořák's and Dargomyzhsky's Roustalka, revolving around the salvation of a water spirit in a handsome mortal. Loritz's idiom, however, is thoroughly German—a fact that explains his enormous popularity in Germany. This is one of those operas I happen to prefer in highlighted form—particularly when given in such a apt performance.

G. J.

RECORDING OF SPECIAL MERIT

& MENDELSSOHN: Octet in E Flat for Strings. Jaime Laredo, Alexander Schneider, Arnold Steinhardt, and John Darley (violins); Michael Tree and Samuel Rhodes (violas); Leslie Parnas and David Soyer (cellos). MOZART: Concertino in C Major, for Two Violins and Orchestra, K.190. Jaime Laredo and Michael Tree (violins); Leonard Amter (oboe); David Soyer (cellos). Marlboro Festival Orchestra, Alexander Schneider cond. COLUMBIA MS 6848 $3.79, ML 6248 $4.79.

Performance: Wonderfully mellow

Recording: First-rate
Stereo Quality: Excellent

The making of music—particularly chamber music—is quite genuinely a mystique at the summer festivals in Marlboro, Vermont, as anyone who has ever attended concerts there can testify. And through some curious alchemy, the simple love of playing pervades this extraordinarily beautiful record, one of the "Music at Marlboro" series, to such a degree that one can listen to it, eyes closed, and virtually smell the Vermont summer countryside.

It isn't in the least easy to spell out the qualities of the playing here. It has an illusion of spontaneity that one can share and that can be achieved, of course, only by the highest musicianship and discipline; a sense of the sanctity, not only of the music itself, but of playing it beautifully. The Mendelssohn Octet glows with a particular radiance here that yet remains the warmth that can be shared with whom, in general. I do not have a great deal of patience. And the Mozart Concerto—a lovely work, but not one of the composer's greatest—sounds here like a masterpiece of the first order.

Columbia has done beautifully with the sound: it is warm, lucid, and wonderfully rich. And the stereo treatment is just exactly right.

W. F.

& MOSSORSKY-STOKOWSKI: Pictures at an Exhibition. DEBUSSY-STOKOWSKI: The Lamented Cathedral, New Philharmonia Orchestra, Leopold Stokowski cond. LONDON SPC 21016 $5.79, PM 55004* $4.79.

Performance: Spectacularly Stokowskian

Recording: Super-duper
Stereo Quality: Pronounced

A more accurate description of Pictures at an Exhibition as presented here might be, "Stokowskia—freely after Moussorgsky." But never mind the niceties of fidelity to text, if one can accept the logic behind the spirit of the great virtuosos of a century and more ago who had no compunction regarding free embroidery on a given musical text, and who could carry it off with superb panache.

Viewed in these terms, the Stokowski Pictures is an altogether remarkable achievement—simply as sheer virtuosity of scoring and brilliant execution. The Debussy transcription is considerably less lurid, but no less effective.

The recording is brilliant all get-out, perhaps a trifle too much so—I would like to hear this on tape one day to get a clearer aural view of the total accomplishment.

Presumably, London's Phase 4 series will be giving us in due course the rest of the Stokowski transcriptions under his own wizard hands—the Rachmaninoff, Toccata and Fugue in D Minor, and Chaconne; the Albeniz El Corpus en Seville; the Moussorgsky Boris and Night on Bald Mountain; the Wagner syntheses including Tristan and Parsifal. Let us hope for more, just as we hope for the glorious Stokowskiian Philadelphia Orchestra sounds of the 1930's in contemporary stereophonic splendor, this Phase 4 series is surely the next best thing! D. H.

& MOZART: Divertimento No. 7, in D Major (K. 205); March in D Major (K. 290); Castigation No. 2, in B-flat Major (K. 99). Members of the Vienna Octet. LONDON CM 9333* $4.79.

Performance: Gemütlich

Recording: Excellent
Stereo Quality: Good
Both the Divertimento and the Casation present Mozart in a mood to entertain pleasantly but not to astonish. The march is considered to belong to the Divertimento and is used here both as an introduction and closing in the same way that the opening march of the Casation is used to begin and end that work. Another interesting sideline on the attempt to recreate performances as they might have occurred in Mozart's day is the introduction of slight embellishments in the repeat of the Casation's third movement. The additional ornaments are ultra-conservative, but the attempt is a welcome one on stylistic grounds. Altogether, these performances are genial ones, relaxed and easy-going, as is suitable for music that was intended to accompany conversation. A bit more attempt at sparkle might have given this background music more character, but this minor Mozart is pleasantly and graciously set forth nonetheless. London's recording is first rate. I. K.

ALFRED BRENDDEL plays

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Accompanied by I Solisti di Zagreb, A. Janigro, conductor

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AMERICIERS
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HONEGGER:

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Maurice Abravanel, conductor

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Brendel... is clearly one of the big pianists of our time.

-J. Kolodin, Saturday Review

Arthur Fiedler made some notable recordings with his Sinfonietta during the 78-rpm days and then again in the Fifties. That the conductor of the Boston Pops is just as adept at an earlier, more esoteric repertoire as he is with the kind of warhorses and popular arrangements for which his name has become a household word, is once again brilliantly proved with the present album. In spite of the appellation of organ or epistle sonatas for these seventeen brief works, the keyboard instrument, with a few notable exceptions, acts primarily in a continuo function. The show, consequently, is very much Fiedler's, and for sheer charm and sparkle, these performances are exceptional. Carl Weinrich's playing in the more prominent passages of the Mozart and in the first of Haydn's three organ concertos is first rate, and the recorded

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Brendel... is clearly one of the big pianists of our time.

-J. Kolodin, Saturday Review
sound is very evocative of the interior of a church (where indeed it was made). J.K.

RECORDING OF SPECIAL MERIT

@ @ NIELSEN: Symphony No. 4, Op. 29 ("The Inextinguishable"). Royal Danish Orchestra, Igor Markievitch cond. TURNABOUT TV 340505 $2.50, TV 4050* $2.50.

Performance: Thrilling
Recording: Full and bright
Stereo Quality: Good

When the Fifth Symphony of Carl Nielsen was heard in this country for the first time some years ago, an American critic was moved by its final pages to speak of "the victory of the incorruptibles and the unafraid."

To the Fourth Symphony by the Danish master, bearing the motto, "Music is life and as such inextinguishable," the critic's words apply in equally full measure. And one may recollect that Carl Nielsen set this stirring music to paper in 1916 as a defiant life assertion in the face of the mounting horrors of World War I.

Thus the Nielsen Fourth Symphony plunges us directly into unrelenting conflict, relieved by a motto theme that bespeaks the "one small yes at the center of a vast No."

A bucolic, almost minuet-like, windwood-colored movement follows as needed relief. Then the element of stem, life-asserting resolution begins, in the slow movement, to have its say with a single union statement for violins, culminating, in the finale, in a titanic duel for timpani situated at opposite ends of the stage. The full orchestra finally overpowers all in a climactic statement of the "humanity" motto so timidly stated in the Symphony's early pages.

At this writing, we have had four recordings of the Carl Nielsen Fourth Symphony, three of them issued in this country within the past six months (the latest, to be reviewed in a subsequent issue, is that by Max Rudolf and the Cincinnati Symphony for Decca): but so far it is this new Turnabout disc at the modest price of $2.50 (stereo/mono) that has put all competition in the shade, thanks to the extraordinarily dynamic reading by Igor Markievitch with the Royal Danish Orchestra.

I have vivid memories of many performances by the Russian-born conductor-composer, and the distinguishing element of all of them was the tremendously high voltage generated in terms of both rhythmic intensity and expressivity of phrasing. This is exactly what is needed to do full justice to the Nielsen Fourth Symphony; for otherwise, the first movement becomes too heavy and thick in texture and the second movement is made to seem trivial. The Markievitch approach works magnificently in this recording.

And to our great good fortune, the recorded sound is powerful, amply reverberant, yet clear and brilliant. The timpani duel at the end is hair-raising in its impact when heard on topnotch playback equipment.

D. H.

PEITZNER: Eichendorff Lieder (see WOLF)

RECORDING OF SPECIAL MERIT

@ @ POULENC: Songs, Le Bestiaire (complete); Ballades (complete); Tel jour telle nuit (complete): La Fratrie et le Jeu; loved by Poulenc song aficionados are here: the shamefully languorous, eloquently effete Hôtel; the sinuously terse La Carpe from the early cycle, Le Bestiaire: the painful, nostalgic "C," an evocation of France in 1940 and the onset of the Nazi invasion. . . . One could add to the list of individual treasures, but the newcomer to the Poulenc song literature will quickly find his favorites among the bounties of this new release.

Those unfamiliar with the manner—the precise ingredients that make a Poulenc song should be warned that any attempt to describe it verbally invariably reads like a madcap musical recipe. Eclectic borrowings from everyone, including Ravel, Satie, Schumann, Schubert, and the French music hall, are merged with eerie results to achieve an entirely personal manner style. The vocal lines are spun with an absolutely impeccable shapeliness and—contradiction in terms—though it may seem to be—an elegant, often rather vulgar tunefulness.

Like most of the best contemporary song literature, Poulenc's songs have been an ingratiating British for years now. It is not a moment too soon to make them available on so generous a scale to a wide record-buying public. Kruysen works with them sensitively, delicately, and stylishly. If I personally have a somewhat different view of certain ones of those songs, any detailed reference to differences here would (and should) be quite correctly dismissed as musical nit-picking. The singer and his accompanist have given the music an account that transcends the merely honorable, and I feel nothing but gratitude for the undertaking. Westminster's recorded sound and stereo are fine. W.F.

RECORDING OF SPECIAL MERIT

@ @ PROKOFIEV: Violin Concerto No. 1, in D Major, Op. 19, Nathan Milstein (violin); Philarmonia Orchestra, Carlo Maria Giulini cond. Violin Concerto No. 2, in G Minor, Op. 63, Nathan Milstein (violin); New Philharmonia Orchestra, Rafael Frühbeck de Burgos cond. ANGEL S 36009 $5.79, 36009* $4.79.

Performance: Elegant and expressive
Recording: Excellent
Stereo Quality: Excellent

It would be extremely difficult to fault either of these performances on any count. Milstein's particular brand of sorcery with the violin has, for me, always been rooted in his uncanny ability to sustain the high-arched romantic singing line with an aristocratic lack of excess. One has only to listen to what he does here with the more expansive lyrical events of the first concerto to witness my point perfectly demonstrated.

The violinist does no less well with the more oblique attitudes of the second concerto. This music is rawer, tougher, more demanding of a particular kind of virtuosity. Milstein never fails the work, even though one would suspect that, by its nature, the music is less sympathetic to the violinist's temperament.

Both Rafael Frühbeck de Burgos and Carlo Maria Giulini have provided orchestral support of enormous strength and character, while Angel's recorded sound and stereo are both typical of the company's best. W.F.
I would choose the Rodrigo Concerto over Castelnuovo-Tedesco's as the better half of this release. It makes no pretense to being anything more than somewhat elevated populism, it's Spanish to the teeth, and it uses the guitar in an uncommon flair. On this last point at least, the Castelnuovo-Tedesco piece is scarcely to be admired less. But the music itself rather grieves me. The man is concerned with style—but what emerges is not his own in the least. It's a clash of the contemporary idiom with a rather more "sophisticated" musical texture, but he does nothing about it but orchestrate somewhat more fussily. There is something curiously patronizing about the directness of the work, and there is nothing in the least personal to it.

The recorded sound, Williams' playing, and Ormandy's elegantly discreet accompaniments are all admirable. You will not, of course, get so judicious and credible a balance between the weak guitar sound and the orchestral accompaniment—skilfully light as it is in both works—in the concert hall. But that, I suppose, is what advanced recording techniques are for.

**RECORDINGS OF SPECIAL MERIT**


Performance: Striking
Recording: Excellent
Stereo Quality: First-rate

As a particular admirer of the rather special music of Albert Roussel, I find this coupling of the Third and Fourth symphonies a real bounty. The Third, of course, is the better known and by far the more immediately appealing of the two. In spite of its rather raggy harmonic style and abrasive rhythms, it is full of bright tunes, and it has what is surely one of the loveliest slow movements in all contemporary symphonies. The Fourth is a somewhat harder nut to crack. I do not mean to suggest that there is anything forbidding in the idiom per se. It is merely that the Fourth yields its secrets less readily than the Third, and its particular kind of expressivity is somewhat more oblique. Still, it is a work that repays careful attention and repeated listening. Even more than the Third, it makes us aware of how extraordinarily subtle and individual a composer Roussel was.

The performances are superb. Although I would not necessarily choose Cluytens' conception of the Third over Herstein's, to be heard on a Columbia disc, both symphonies benefit here from the characteristically French sound of the string and woodwind playing. The sonics and the stereo treatment are both of the highest quality.

**RECORDING OF SPECIAL MERIT**


Performance: Revelatory
Recording: Excellent
Stereo Quality: Fine

The Juilliard Quartet has a way of performing miracles of revelation with the standard classical and Romantic quartet repertoire. As I have previously pointed out in the (Continued on page 73)
CHARLES IVES: MAKING UP FOR LOST TIME

By JAMES GOODFRIEND

To those of us who waited impatiently through the dark ages for any little recorded scrap of anything by American composer Charles Ives, it is clear that the millennium has arrived. The debt owed to him through neglect is now being paid off in a kind of installment plan: gratifying scope and lasting value. At the moment, we are twice blessed with releases of major importance from both Columbia and RCA Victor, the former with the Third Symphony, the latter with the never previously recorded (or heard?) First Symphony, and both with valuable shorter pieces.

The RCA Victor disc begins with the Variations on a National Hymn [America] in the orchestration by William Schuman. I must admit that I did not like the orchestral version on first hearing; it seemed to me to have a certain flashiness not implied in the original organ work. While that may still be true, repeated listenings have convinced me not only of the effectiveness and skill of the transfer, but of the enormous potential appeal of the work in this form to listeners not yet familiar with Ives’ music. The piece is brilliant and witty, and it is played here by Morton Gould and the Chicago Symphony for all it is worth—plenty. The Variations, polytonality and all, were composed sometime before 1894. Ives was then twenty and entering Yale to study, among other things, music.

The Symphony No. 1 is a Yale product; in some ways it is more Yale than it is Ives. Ives wrote it while a student of Horatio Parker in composition, and what is more important, he wrote it for Parker, to satisfy thesis requirements. Parker was a capable and conservative composer of approximately Central-European persuasion—although all but three years of his life were spent in the United States—and he was incapable of taking seriously the kind of music (like the Variations) that Ives wanted to write. Ives, though a stubborn man, was always the realist and chose simply not to bother his teacher with experiments. This Symphony is what he wrote instead.

It is, then, his forced attempt to write like a German Romanticist. He did it with a certain awkwardness, but with enthusiasm. Exuberance, a natural feeling for sweep and flow, a sense of humor, and, at moments, a management of musical materials similar to his more personally individual works. There are, in the Symphony, bits of Tchaikovsky, Wagner, Bruckner, Schumann, and God knows what else. There is a solo English horn opening to the Adagio that could have substituted for Dvořák’s in the “New World” Symphony (composed, by the way, only five years before). There are chromaticism, and modulation running rampant, and decorative coloration inflamed to the point of bursting. All of it is thrown out with a hilt where called for, toning down for the occasional “Ivesian” hymn-like passage, puffing away manfully in the running basses, and genuinely capturing the score’s fine sense of youth and cliquet-do.

The connecting link between these two records is that strange but phonographically familiar little piece The Unanswered Question. Against a constant background of subdued strings, a solo trumpet propounds the “questions” and is answered by the woodwinds, in brief, that is the composition, but Ives has indicated that the questions and answers are to enter at no preset points but the conductor’s discretion. Therefore, every performance of the piece is slightly different. There is further a connection between the two records in that neither of the two performances is a particularly good one. Gould wants an unconscionably long time (one minute and forty seconds) before the first trumpet entrance, and the acoustic difference between winds and strings (there should be some) is excessive. Leonard Bernstein’s trumpeter, who shies elsewhere, makes several unclear entrances, the strings are frequently of more than one mind about pitch, and there is a profusion of small but extraneous noises. My guess is that the performance was knocked off in a single take—hardly the best way to do things.

As for the remainder of the Columbia record, it is quite as much a triumph as the Victor. The performance of the Third Symphony has great warmth and tenderness. Though Bernstein departs from the printed score occasionally (two measures before No. 11 the phrasing is changed; in the last movement the part for bells is rewritten), I find that I enjoy the performance as a whole considerably more than I did the earlier recordings by Howard Hanson and Reginald Stewart. The Third Symphony is a deceptively simple work, and a thoroughly beautiful one. It is gratifying to hear it done such justice. Decoration Day is one of those little pieces of program music that will drive you insane if you try to follow the program. Far better to read the story through once and then simply listen to the music. Again, the performance is a fine one, although marred by a most unfortunate tape splice in the middle of the last note of Taps. Splitting in the middle of brass notes is a dangerous procedure, and here the dynamic levels of the takes are so different one can’t help but hear it and be annoyed. There is ample justification in Ives’ writings for performing Decoration Day as an isolated piece, but its appearance here as such leads one to the melancholy conclusion that Mr. Bernstein will probably not record the entire “Holidays” Symphony, of which this is a part.

The showstopper of the Columbia record is Central Park in the Dark, in many ways a pocket compendium of Ivesiana. It is the most American and most urban of nocturnes, the serenity of its opening being gradually overcome by melodie fragments of Hello! My Baby (1899) and assorted razz-ma-tazz. The performance, conducted by Seiji Ozawa and Maurice Peress “under Mr. Bernstein’s supervision,” is clean as a whistle, gleeeful, and fairly crackles with energy. Comparison with the old Cherviakovskiy recording on Polymusic (long, long out of print) is staggering; this is almost too good. Could someone have made a few smaller changes? No matter. It sounds perfectly glorious, and if it’s Ivesian excitement you want, you’ve come to the right record. Actually, that goes for both releases. I can’t imagine a self-respecting record collector’s being without them.

© IVES: Variations on a National Hymn [America] (orchestrated by William Schuman); Symphony No. 1 in D Minor; The Unanswered Question, Chicago Symphony Orchestra, Morton Gould cond. RCA Victor LSC 2893 $5.79, LM 2893* $4.79.

columns of this magazine, the stylistic process seems to have come about through the group's initial immersion in masterpieces of the twentieth-century repertoire and its demanding technical and stylistic disciplines. These disciplines, turned back on a Beethoven or Schubert quartet, produce a new view of the work—one that illuminates its developmental place in the history of music.

While an interesting and similarly indoctrinated pianist such as Charles Rosen can often turn this approach into a kind of performed musico-linguistic lecture—and on rare occasions can distort the intent of Beethoven, for example, to make his point—the Juilliard Quartet does no such thing. In these Schubert performances the romantic lyricism, the "endless melody," is preserved in fact and in spirit. But so many of the things we customarily think of as Schubert's weaknesses—simplistic formal molds, emphasis on the material itself rather than the control of it—seem, if not to disappear altogether in these highly disciplined performances, at the very least to be right for what this particular music is all about.

I am at a loss to say more than this about the chemistry of the Juilliard Quartet and its stunning projection of the standard repertoire. I can only add that Epic's new release has brought the present writer revelatory performances of two Schubert quartets that I have spent a large part of my musical life feeling I could take or leave.

The recorded sound and the stereo treatment are both absolutely first-rate. W. F.

RECORDING OF SPECIAL MERIT

Schubert: String Quintet, in C Major (D 956), String Trio Movement, in B-flat (D. 471), Vienna Philharmonic Quintet; Richard Harland (second cello). LONDON CS 6441 $5.79, CM 9441* $4.79.

Performance: Perfection

Recordings: Fine

Stereo Quality: Good

The great Schubert C Major Quintet, like the "Great" C Major Symphony, can communicate its essence only through the medium of a performance that strikes a flawless balance between rhythmic dynamism and emotionally organic phrasing—not to mention an innate insight on the part of the performers into Schubert's special brand of tonal architecture. Here at last is an up-to-date stereo-recorded performance combining all these elements in precisely the right measure, and the result is music-making that is beautiful and moving beyond the power of words to describe. The middle movements are the peak here—the slow movement being absolutely spellbinding in its almost imperceptible but relentless intensification of emotional expression; while the contrast between the frantic gaiety of the scherzo and its somber trio is communicated with singular eloquence. The end movements are no less beautifully played; and the string-trio movement which is used as a filler—though cast in Schubert's youthful instrumental style—is by no means inconsequential.

The recorded sound is fine throughout. Speaking for myself, I would automatically nominate this disc as a major addition to the great chamber-music recordings list. D. H.

(Continued on next page)

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Performance: Juvenile
Recording: Excellent
Stereo Quality: Fine

In André Previn's curiously uncalled-for defense of Shostakovich's Fifth Symphony, quoted at length in RCA Victor's sleeve annotation, the young conductor says, among many other things, that he doesn't think one can "do justice" to performance of the work through "understatement." And, of course, he has put his extremely competent finger on just exactly what is the matter with his own sprawling, rhapsodic, rhetorical performance.

The symphony, although tightness of structure is not precisely its strong point, is not a film score. It has high points, low points, simple padding, transitions, just all sorts of things that a trained composer uses to construct an extended work. Mr. Previn plays it all as if every part were his very special favorite, as if if were the just due of every bar to receive a highly "turned-on" variety of Tender Loving Care. Some of it is very nice, some of it is so overdone that it sounds silly; nearly all of it is musical. But as a fresh statement on this well-worn contemporary favorite, the performance is kid stuff.

But I don't suppose it is going to do me the slightest good to say so, but I find the promotional copy on this—and other of RCA's recent serious releases—to be both misleading and tacky. "Few musicians in modern history have managed to negotiate careers as multifaceted as André Previn's..." blarts a large, prominent quotation on the sleeve. Such a use of quoted material slyly leads us to the conclusion that this is an outside, disinterested critical evaluation of the artist. But one who pursues the annotation carefully enough discovers that the quotation is picked out of the jacket notes, that, in the present case, it appears over the byline of a critic for The Los Angeles Times. The man in question—an intelligent and perceptive one, ordinarily—may possibly entertain so absurd an opinion about Previn.

On the other hand, whether he does or not, I find it annoying and high-handed of RCA to quote its own promotion as if it were critical opinion.

The recorded sound and stereo are, I am pleased to report, excellent. W.F.

RECORDING OF SPECIAL MERIT


Performance: Powerful, well-proportioned
Recording: Generously good
Stereo Quality: Good

The first performance I ever heard of the Sibelius Second Symphony was in the early 1950's, recorded in England under the direction of Robert Kajanus, Sibelius' closest musical colleague and most authoritative interpreter. I have always remembered the remarkable combination of power and proportion that emerged even from the faded sound of those old discs. In this Philips recording I hear what strikes me as a virtual recreation of the Kajanus reading—absolutely just in its communication of drama, symphonic architecture, and orchestral color. There is warmth and immense conviction in the Szell reading from start to finish and, most important, complete freedom from exaggerated phrasing, dynamics, and other merrymaking tricks.

The recording of the Concertgebouw Orchestra is well above the average achieved in recent years. All things considered, I would rate this latest version of the Second as the best currently available. A thoroughly satisfying job all the way! D.H.
The recorded sound seems to me to be partly to blame for this effect. It is rather reverberant and lacking in genuine mid-range presence. Karajan's use of glockenspiel instead of large bells in the Finale is in keeping with established usage in Finland, but the sound is almost too puny here to make any kind of a generally Seligeric effect. I am beginning to wonder if Sibelius did not have in mind for this movement bells of glockenspiel pitch, but far more penetrating in sound than the steel plates normally used.

At any rate, I found this a singularly disappointing Sibelius Fourth. And I was not enamored of von Karajan's somewhat spineless treatment of the magical Swan of Tuonela. This may be fine Teutonic Sibelius—Finnish Sibelius it is not!

D. H.

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Audio Magazine, March, 1966

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and wide range of expression—elements which find the invariably right setting in Wolf's music. Displaying his by now familiar tonal richness and effusive style, Prey brings off the exultant Er ist's! with exciting effect, and captures the mood of Gesang W'ylas hauntingly. His diction is remarkably clear, and his manly, ringing voice makes an impressive impact, though in a few instances (Begegnung, Selbstgeständnis) his intensity seems almost overpowering.

By contrast, the Eichendorff poems are more conventional, and Pfleger's expertly wrought but not particularly thought- provoking music is thus overshadowed by the Wolf group. The songs are worth hearing, however, particularly in Prey's attractive performance. Gerald Moore's accompaniments are exceptional as always—a somewhat paradoxical description, but true.

COLLECTIONS

RECORDING OF SPECIAL MERIT


Performance: Most enjoyable
Recording: Excellent
Stereo Quality: Fine

The most immediately appealing works here, I think, are those by Handel. One is a transcription (from an organ concerto and a recorder sonata, both using the same music) in materials not the other is a reconstruction of a lost flageolet concerto. The Vivaldi concerto, also for flageolet and usually played on the piccolo (though the soprano recorder is closer tonally) is not the most inspired music the Italian wrote, nor is the Telemann recorder concerto one of that composer's works. But if the Handel pieces come off particularly well, the others are not really less entertaining, mainly because of the high quality of the performances. Bernard Krasin plays really splendidly and with full virtuoso flair. His added embellishments are not only nearly rendered but sound perfectly natural—a model of how this kind of addition to the bare text should be done. As much enjoyment comes from the playing of the orchestra under Neville Marriner's direction—Marriner does the same superb work here as with the Academy of St. Martin-in-the-Fields (and this pseudonymous group may well be the same orchestra), and there can be no higher recommendation. Lastly, the recording (although rather high-level and bordering barely on the intense side without a subtle treble cut) is very well balanced between solo instrument and strings.

I. K.

2 James McCracken: Operatic Recital. Verdi: Il Trovatore; Ah! si, ben mio; Di quella pira, La Forza del Destino; O in te, o Dio, Non ti sento, Otello; Tu che il lamento, Rinaldo; Sassari: Salut! domani ch'io ti pure. Wagner: Die Meistersinger; Walther's Prellend. Tannhäuser; Rezitativ, Puccini: La Fanciulla del West; Or so sei mesti. Weber: Der Freischütz; Durch die Wälder. Leibnitz: Pagliacci: Scene, navy, James McCracken (tenor); Vienna Opera Orchestra, Dietfried Berner cond. LONDON OS 25948 $5.79, 3948* $4.79.

Performance: Respectable
Recording: Excellent
Stereo Quality: Effective

There are many impressive things in this demonstration for a dramatic tenor. The heroic sound and sizable range of McCracken's voice demand admiration, but phonographic scrutiny reveals many shortcomings in tonal refinement and stylistic distinction. Even with this reservation, McCracken's Rezitativ and "Nun mi tenta" are at least up to the best contemporary standards, and the arias from La Fanciulla del West and La Forza del Destino

Hermann Prey

A manly, ringing voice for Wolf lieder

Hermann Prey

A manly, ringing voice for Wolf lieder

Madeleine Grey: Canteloube and Rare Songs (see Best of the Month, p. 55)

RECORDING OF SPECIAL MERIT


Performance: First rate
Recording: Very good
Stereo Quality: Satisfying

Volume One of what promises to be an extremely worthwhile series of organ discs is devoted to the North German school, whose leading representative was, of course, Buxtehude. Also included here are some of Buxtehude's predecessors. Franz Tunder (1614-1667), who was organist at the Lübeck Marienkirche just prior to Buxtehude, and Matthias Weckmann (1619-1674), a pupil of Schütz. Almost contemporaneous with Buxtehude were Nikolaus Bernhard Bruns (1665-1697), Johann Nicolaus Handf (1665-1711); and Andreas Kneller (1649-1724). The younger generation, just prior to J. S. Bach, is represented by Georg Böhm (1661-1733) and Arnold Bruchnocht (ca. 1675-1720).

Most of these pieces are grand in scope, especially those impressive preludes and fugues by Bruns and Kneller which anticipate the drama and fireworks to be heard in the later Bach pieces. Bach's indebtedness can also be detected in some of the slower chorale preludes. Hansen's approach is in keeping with the slightly more austere attitude of the North Germans (as against the more flamboyant kind of performance that one might have heard from South German or, say, Italy), but he also makes the most of the possibilities for technical display, whether on the manuals or in some characteristically virtuosic pedal passages. Registration is first rate, and the Baroque-style organ in Copenhagen is perfectly suited to the material. Nonesuch's recording is very good.

I. K.
are not far behind. Least satisfying of the lot is the Transcendence scene, and London did the artist no favor by placing it at the beginning of the recital. And the random intermingling of German and Italian selections is not conducive to the best artistic results. Still, the recorded sound is uncommonly rich and well-detailed, and the orchestral backgrounds under the heretofore unheard conductor are exemplary. G.J.


Performance: Excellent Recording: Satisfactory Stereo Quality: Okay

I couldn’t be more pleased with either the idea behind this album (revival of interest in one-piano, four-hand playing) or the wonderfully musical and hequallying modest work of the two musicians who play here. And the recording brings to attention a perfect gem of a piece: Paul Hindemith’s Duet Sonata, which practically no one knows, small masterpiece though it is, exactly because four-hand piano playing is to such a large degree something that only musicians know about.

With such expectations, my disappointment was great when I discovered that the disc gives over precious space to a four-hand transcription of Stravinsky’s Petrovchka. It can be wild fun to have a go at it in one’s studio with a friend—it’s usually wise to warn bystanders away, though—but who needs to sit in a chair listening to it on a record? Smoothly as pianists Menuhin and Ryce have polished their performance of it, the piece sounds silly and even banal unless imagination fills in the instrumental color.

My point need not be labored further. The key to the value, even the artistic validity, of an undertaking such as this, is to be found in so felicitous a program choice as the Hindemith. Heaven knows, there is no abundance of such literature, but filling two disc sides would have been a cinch. Without this kind of program material, such a record will be mostly of interest to those perennial maiden aunts who “just love the sound of a piano.” The recorded sound and stereo quality are satisfactory. W. F.


Performance: Worthy Recording: Very good Stereo Quality: Fine

The concerto repertoire for recorder is not at all extensive, but Vanguard has assembled a fairly interesting collection, well designed to show off the potentialities of the instrument. The Sammartini concerto, previously recorded by Jean-Pierre Rampal on the flute, is heard here in presumably its original version. The concerto by Jean Jacques Naudot, a Parisian who worked during the first half of the eighteenth century, could have been played by either recorder, flute, oboe, bagpipes, or hurdy-gurdy. Interchangeability of instruments being a standard Baroque practice, however, the recorder sounds perfectly effective. Perhaps the most curious piece of the collection is the Telemann double concerto, in which the two by then rather old-fashioned instruments (old fashioned at any rate for a forward-looking composer such as Telemann) toss themes back and forth to each other most entertainingly.

Ferdinand Conrad, who has done much recording previously, notably for Archive, is an instrumentalist thoroughly familiar with Baroque style and performance practices, and these are stylishly satisfying performances. As a recorder player he has a good (but not much varied) tone, as well as a serviceable technique. I do think that there are other recorder players, notably Hans-Martin Linde, Frans Brüggen, and Bernard Krainis, who hold more claim to the title “virtuoso” than Conrad does (compare Linde’s Archive recording of the Naudot), but by and large, these are extremely enjoyable performances. The accompaniments are very well done, and the sound, recorder fairly forward, is warm and clear. I. K.

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HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

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Reviewed by MORGAN AMES • JOE GOLDBERG • NAT HENTOFF • PAUL KRESH • GENE LEES

RECORDING OF SPECIAL MERIT

** HAROLD ARLEN: Harold Sings Arlen (with Friend). Harold Arlen, Barbara Streisand (vocals); orchestra, Peter Mazzeo cond. Blues in the Night; Little Biscuit; Ding-Dong, the Witch Is Dead; A Sleepin' Bee; In the Shade of the New Apple Tree; Hit the Road to Dreamland; A-cent-tcha-twine the Poitin': My Shining Hour; Today I Love Everybody; House of Flowers; For Every Man There's a Woman; That's a Fine Kind of Freedom. COLUMBIA OS 2920 $5.79, OL 6520 $4.79.

Performance: Charming
Recording: Good
Stereo Quality: Good

Critics and musical scholars of the year 2025, if there is a 2025, are going to say that some of the greatest American music of the twentieth century went almost completely un-noticed by the 'serious' critics of its own time, namely jazz and classical critics. They'll be referring to certain music coming from what is usually called Tin Pan Alley. Songs by, among others, George Gershwin and Cole Porter and Matt Dennis. And, most assuredly, Harold Arlen.

Arlen is one of our greatest composers, a point on which I agree entirely with Edward Jablonski, who wrote the useful and literate liner notes of this album. Arlen's tunes are singable because he can sing. In my own work as a lyricist, I have learned to avoid those composers who don't enjoy singing. Composers (and other musicians) who don't sing often have a hidden condescension to singing—based on the foolish notion that just anybody can do it—and they write badly for the voice. Arlen obviously enjoys singing, and admires the expert practitioners of the art.

Arlen's own voice is pleasant, clean, in tune, warm, and a little odd. The texture is funny, but this gives a distinctive quality to the album. Arlen's singing is not unlike that of Johnny Mercer, the brilliant lyricist of four of the Arlen tunes in the album. Maybe they influenced each other.

Two tracks of this album are marred by the presence of Barbara Streisand, who has recently lapsed into an affected over-enuciation of almost everything. I suppose it's a good commercial idea to have her on the disc:

Streisand nuts will buy the album just to get those two tracks. But the album would have been a more consistent and more musical entity without her.

It is always interesting to hear a composer's interpretation of his own material. This is very much so in the case of Harold Arlen. G. L.

** LEO FERRÉ: Léo Ferré, Léo Ferré (vocals); orchestra, Notre Dame du Le mont: Le pont Mirabeau; Vittoria; and nine others. OXFORD OSX 20.005 $5.79.

Performance: Moving
Recording: Only 10-10

There are many, and significant, differences between the American and French traditions of popular music. The American popular song is usually (a) something created for dancing, which means its lyrics are insignificant even when they are literate, or (b) a fragment taken out of a Broadway show. In the latter case, chances are that the song was written with built-in ambiguity, meant to have one meaning in the show and another out of it. France, however, has a long and important tradition of songs at such—songs meant to be exactly what they are, little verse stories set to music, to be listened to, rather than danced to. It is scarcely surprising that the level of song lyrics is higher in France than it is here.

I think Léo Ferré is the greatest of the post World War II French songwriters. His work is often touted for its 'social significance,' as in the liner notes of this album. But it doesn't move me because it is significant, it moves me because it is moving. Long before I understood French well, I found a quality of melancholy in his curious tenorish singing style and something unforgettable in his melodies. Later I learned that his lyrics are as eerily haunting as his tunes. Nuts to the social significance of Ferré's songs—there's beauty, that's the thing to know about them.

Ferré uses a variety of musical devices to make the settings of his songs interesting. You'd never mistake them for dance music—they're too programmatic, even in their orchestral accompaniments.

Two of the Ferré songs in this album—Paris-Canaille and Le piano du pauvre—became international successes of a sort. The rest are unknown outside France. Ferré's style is ultimately indescribable. If you don't understand French, I'd pass this album by. And if you do speak French, you probably don't have to be told that it's good—merely that a Ferré album is available in those stores that carry imported records.

** RON GOODWIN: Sunrise Sere nade, Orchestra. Ron Goodwin cond. Theme from 'Romeo and Juliet': Clair de lune; Prairie Serenade; and nine others. UNITED ARTISTS UAS 6464 $4.79; UAL 3464* $3.79.

Performance: Polished
Recording: Good
Stereo Quality: Good

British arranger-conductor Ron Goodwin has collected here some "light orchestral music"—unimportant, but quite pleasant. Mr. Goodwin's arranging, especially for strings, is silken, with classical influences. His own compositions, though professional, are among the least interesting. The excellent thirty-six-piece orchestra is authoritatively conducted.

This project suggests that Mr. Goodwin, a man who knows what he's doing, has chosen to apply himself to producing a quality album of sit-back-and-relax music, I'd be interested to see how he'd handle a more serious musical undertaking.

** JOE HARNELL: Golden Piano Hits. Joe Harnell (piano, conductor); orchestra. Alley Cat; Cast Your Fate to the Winds; Canadian Sunset; and nine others. COLUM BIA CS 9266 $4.79; CL 2466* $3.79.

Performance: Polished
Stereo Quality: Good

There seems to be a whole army of pianists putting out grand-scale cocktail music these days, using large orchestras and elaborate arrangements, no matter how inconsistent...
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the songs. The pianists sound pretty much the same: technically clever and otherwise cold. They have no discernible influence in music except on each other; that is, they trade mannerisms back and forth.

Pianist Joe Harnell has put out such an album, but obviously he has more going for him than the run of cocktailsters. For one thing, he did all the arranging, and several tunes (Autumn Leaves, for one) have moments that indicate that Harnell writes quite well when he chooses to.

Overall, the album is trite. In The "Hi" Crowd. Harnell sounds like Peter Nero, and Canadian Sunset is pure Roger Williams. As cocktail music goes, you won't find much that's better than this. But surely Harnell can do better.

M. A.

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**RECORDING OF SPECIAL MERIT**

@ **MARILYN MAYE: The Second of Maye.** Marilyn Maye (vocals), the Sammy Tucker Quintet. The Sweetest Sounds. I'll Know; My Ship; and nine others. RCA Victor LSP 3546 $4.79, LPM 3546 $3.79.

Performance: Sporadic Recording: Very good

Stereo Quality: Very good

This is Marilyn Maye's second album for RCA Victor. I have no idea how the first, which is electrifyingly good, slipped by without review in this magazine. But that seems to be her problem. How anybody this good can go undiscovered for so long—Miss Maye is in her thirties—is a mystery, but she did it. She stayed in Kansas City, but still,

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**RECORDING OF SPECIAL MERIT**

@ **JOHN LEE HOOKER: It Serve You Right to Suffer.** John Lee Hooker (vocals, guitar), Milt Hinton (bass), Barry Galbraith (guitar), Panama Francis (drums), Dicky Wells (trombone). Shake It Baby; Bottle Up and Go; Sugar Mama; and six others. IMPULSE AS 9103 $5.98, A 9103 $4.98.

Performance: Authentic, individualistic

Recording: First-rate

Stereo Recording: Very good

John Lee Hooker is expert in weaving many different kinds of moods in the blues, but he is at his most compelling in brooding songs of lonely wandering. (His CowBoy Blues here is a major addition to the Hooker discography.) In this characteristic set of performances, Hooker is a master of understatement as he unfolds basic tales of the blues life. Complementing his dark, rumbling voice is his extraordinarily expressive guitar. The rhythm section is solid.

N. H.
Lonely Things; The Good Times is All Done Now: and eleven others. RCA Victor LSP 3508 $4.79. LPM 3508R $3.79.

Performance: Persuasive
Recording: Poor
Stereo Quality: Fair

If I may assume that Rod McKuen makes a reasonable living in his chosen field, then his career is heartening. He lives off good music—his own. McKuen writes and sings in his line of work. The material has a special flavor, both smooth and gritty, knowing and helpless. His voice is rough but warm, with an undeniable sincerity.

Of the fourteen originals in this collection, there are more fine songs than one is accustomed hearing in a single album. The most striking are She, Truck Stop, Thank You, and People Change.

Though the scope of McKuen's lyrics has been growing, there is still a feeling that the melodies are subordinate to the words. His tunes still sound folksy, while his lyrics have passed far beyond that generally narrow idiom. If McKuen is not already studying harmony and composition, I wish he would. He has the talent, drive, and ideas; all he needs now is more musical technique. Nonetheless, Rod McKuen is today one of a small cluster of writer-performers who are in a position to raise the level of quality popular music and bestow upon it the dignity it deserves.

I happen to love beautiful songs; if I didn't already have this album, I'd buy it.

At L.

**RECORDING OF SPECIAL MERIT**


Performance: Immaculate
Recording: Very good
Stereo Quality: Very good

In his liner notes, Stan Cornyn puts us on unmercifully with a colorful history of the Mexicali Singers, discovered by Miss Anita Kerr: "In the picturesque village square of Mexicali, the trip to the recording studio was a grand adventure. But the Mexicali Singers obviously are the Anita Kerr Singers, one of the best and busiest singing groups in the country.

If you've never heard of Miss Kerr, it's because she's been in Nashville, providing vocals for backgrounds for country-and-western music, which is startlingly far below her own level of competence, and I hope she has been making a fortune. Occasionally her group steps forward alone, as with a recent and sensational album in which they sing Henry Mancini tunes.

This album is a vocal version of the Tijuana Brass. Miss Kerr is credited with producing the album; I assume she also did some or all of the arranging. The singing is predictably (almost maddeningly) flawless. Guitar as in Tijuana Taxi and Cabo Candy, the voices sound amazingly like trumpets.

This is not, nor is it meant to be, an inventive album. But if sheer competence (in anything from short-order cooks to dentists to musicians) pleases you, as it does me, you'll enjoy this disc.

Al A.

2. **BOBBIE NORRIS: The Beginning**: Bobbie Norris (vocals); orchestra, Torrie Zito cond. Ill Wind: Quiet Room: You're My Tiffany: and nine others. COLUMBIA CS 2253 $4.79, CL 2424 $3.79.

Performance: Good
Recording: Good
Stereo Quality: Good

This is the debut album of twenty-four-year-old Bobbie Norris, and is far from flawless, but she has more to recommend her than most of the new crop. For one thing, she doesn't try to cash in by singing like Streisand, as an amusing number of hopefuls are doing. Miss Norris has a huge contralto voice, which she uses with some authority. It's enormously difficult to be thorougly pleasing without being shallow, and Miss Norris has managed it.

Torrie Zito's arrangements are quite good, though both he and Miss Norris miss the gentleness of Ted Hellerman and Frank Minkoff's Quiet Room, Greer Johnson's liner notes are among the best I've seen in a long time.

Miss Norris' flaws are of the sort that can be refined through continued work. Most singers hate their debut albums, but Miss Norris has no reason to moan over hers. It's good, and she shows much promise.

Al A.

3. **BRIAN POOLE AND THE TREMELOES**: Brian Poole Is Here, Brian Poole, The Tremeloes (vocals and instrumental accompaniment). I Want Candy: Michael Row The Boat Ashore: Hands Off: and nine others. AUDIO FIDELITY AFSD 6151 $4.79, AF 6151* $3.79.

Performance: Harsh
Recording: Good
Stereo Quality: Good

If you read the rather stupid liner notes of this album carefully, you can learn a lot about the producer, who perhaps should be called discotheque music these days. For example, of one tune the notes say: "The boys wanted to record this so that Alan Blakeley could try out his harmonica playing—he'd been driving them all mad for weeks." (The inflection on the word "mad" is theirs, not mine.) What is interesting about the quotation is the premium it puts on ignorance. Now how do you like that—trying out an instrument on a record date? It doesn't matter, I suppose. The people who buy records of this kind have no interest in music anyway. They like loud, pounding noise, and that's it.

The liner notes make much of how much laughter the boys endured in the process of making the records, and it's a funny picture of them on the back—one is stripped to the waist, and the others are feeling his muscle. No doubt the emphasis on their laughter is to convince us Brian and the Tremeloes are as amusing as the Beatles. They aren't.

G L.

(Continued on next page)
MOTHER MAYBELLE CARTER: A Living Legend. Maybelle Carter (vocals, guitar), and unidentified accompaniment by instrumental and choral groups. Charlie Burrell— acre, A.M. of You Joe: A Letter from Home; There's a Mother Always Waiting; and seven others. Columbia CS 9275 $4.79, CL 2475 $3.79.

Performance: Warm, unpretentious
Stereo Quality: Very good

Maybelle Carter is a donee of country music. She was a member of the original Carter family on records (with A. P. and Sarah Carter), and her three daughters (Helen, Anita, and June) have continued the tradition. Her repertoire here includes songs by A. P. Carter, some of her own, and others thoroughly within the idiom. Mother Maybelle Carter’s style is unadorned, her voice is strong but not in the least harsh, and her emotions are clearly at one with the material. The stories, usually sentimental, tell of broken romances, absent loves, and lonely cowboys. She believes in the verities she sings about—the stability of home and country—and by force of her grace, she makes even unemotional city hipsters believe that she believes. The four instrumental tracks are less interesting than the vocals because of their narrow range of dynamics. N. H.

IAN AND SYLVIA: Play One More. Ian Tyson, Sylvia Fricker (vocals), various instrumental backgrounds. Short Grass: Gifts Are for Giving; Satisfied Mind; Friends of Mine; and eight others. Vanguard VSD 79215 $5.79, VRS 9215 $4.79.

Performance: Disappointing
Recording: Very good
Stereo Quality: Good

Canadian folk singers Ian and Sylvia can’t be accused of staying in a narrow groove. In this set, they experiment on occasion with the blending of electronic and acoustic instruments; they venture into folk-rock beats; and, in Play One More, they add a mariachi-like sound to the rock foundation. As for repertoire, their own songs cover a broad range of situations and moods, and they select not only from such city folk bards as Phil Ochs (Changer) but also from the current pop supply (Twenty-four Hours to Tulsa).

And yet this album seldom comes fully alive. A major flaw is textual. Neither Ian nor Sylvia shows enough skill in varying sound and phrasing to the interpretive requirements of differing roles and emotions. Their voices are not nearly pliable enough. And too often the lyrics of their own songs are undistinguishable. An exception is Lonely Girl—a stark sketch of rough girls looking at the swiftly rushing diesels going by as twilight settles down on the too open spaces. But even on this track, the potential of the song is not fulfilled. The setting and atmosphere are only intimated, not brought into bleak immediacy. That Ian and Sylvia are capable of more penetrating performances is indicated by Changers in this set and by numbers from their previous albums. It may be that they’re in a transient stage of conceptualizing new directions without having yet absorbed these expansions of the folk language into the blood and bone of their music, N. H.

BILL MEKK: Traditional and Original Songs of Ireland. Bill Meek (vocals, guitar). Hot Asphalt: The American Wake; The House at the Crossroads; Skibbereen; and thirteen others. Folk-Legacy FSE 21 $4.98.

Performance: Warm, unpretentious
Recording: Good

Bill Meek of Killinchy, County Down, Ireland, is a singer and composer who writes for Radio Eireann, but also works as a farmer. His music—the songs he writes and those by others he chooses to sing—is rooted in tradition while reflecting the wide-ranging contemporary ferment on the Irish folk scene. Although his voice is rather limited in its range of colors, he sings with virile grace, easy wit, and, when the occasion demands, bold defiance and tender romanticism. The songs here are of patriots, lovers, emigrants, workers, the pleasures of Irish food, and football (rugby) as an obsession. There is also a shrewdly mocking commentary on those visiting American folk collectors who measure “ethnic authenticity” by the degree to which the folk are out of tune and out of meter. As is Folk-Legacy’s custom, there is a booklet with complete texts and notes by Meek which illuminate Irish history, social and political, as well as Irish song. Folk-Legacy may be contacted directly at Huntington, Vermont. N. H.

THE NEW LOST CITY RAMBLERS: Rural Delivery No. 1. Tracy Schwartz, Mike Seeger, John Cohen (vocals, violin, guitar, banjo, mandolin, spoons, saws). The Cyclone of Rye Core; Automobile Trip through Alabama Soldier and the Lady; I’ve Always Been a Ramblor; Bachelor Blues; Train on the Island; Fishing Creek Blues; and ten others. Verne/Folkways FVS 9003 $5.79, FV 9003* $4.79.

Performance: Spirited, convincing
Recording: Good
Stereo Quality: Adequate

These three citybilles, who have chosen to concentrate on Southern mountain music, are considerably more believable than their urban counterparts who pretend to be blues singers in the Negro tradition. One reason is that the New Lost City Ramblers are not solemn and pretentious about their work. Nor do they, like some of the urban blues bards, try to make premature legends of themselves. They are also good musicians—and Mike Seeger is even better than good. Furthermore, the Ramblers are accomplished role players, and they have managed to absorb at least some of the spirit, the wit, and the wryly independent point of view of Southern mountain folk. In this characteristic collection, the Ramblers have selected a broad range of material—dance tunes, comic songs, dramatic ballads, blues. Each member of the trio, incidentally, has written a brief essay for the notes in which he clarifies his approach to “folk music, urban performance, and validity.” The analyses are thoughtful and are all the more persuasive in that they are borne out by the quality of the music. N. H.

PENNYWHISTLERS: Folk Songs of Eastern Europe. Pennywhistlers (vocals); unaccompanied. Skito Mi e Milo; Di Arbaz; Portland Town; Ladake; and eleven others. Non-Set H 72007 $2.50, H 2007* $2.50.

Performance: Crystaline
Recording: Good
Stereo Quality: Good

The Pennywhistlers are a group of seven young American women who perform folk songs from Bulgaria, Czechoslovakia, Hungary, and other countries. Their work is remarkable, in a quiet way. They sing with assurance in seven languages. Their arrangements are tasteful (though somewhat monotonous) and impeccably rehearsed. Their intonations on this predominantly a cappella album is excellent. Ethel Raim arranges, solos, and plays banjo on various selections, all with skill. One must assume that an enormous amount of time and work went into preparing this material. The Pennywhistlers have produced a sensitive, fragile, and vaguely troubling work of beauty.

In view of the unusualness and high quality of this relatively unknown singing group, the lack of information in the liner notes is inexcusable. Who are the Pennywhistlers? Where did they come from? What caused them to produce such unusual music? Of course, music reviewers have ways of uncovering such information when record companies are not too short-sighted or dull-witted to provide it on record jackets. But what of the record buyer in, say, the Midwest? If he’d like to know more about the Pennywhistlers, that’s his tough luck, I guess. M. A.
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HF 192
When Johnny Mandel wrote his score for the film *I Want to Live* and Elmer Bernstein wrote his for *The Man with the Golden Arm*, it was a cause for fuss in the jazz world; these were said to be the first jazz movie scores. Whether they were or not is an argument not worth entering into here. But it is worth noting that not until the appearance of Henry Mancini’s scores did producers open their ears and their minds to the uses of jazz and popular music in motion-pictures, instead of the neo-Ravel, neo-Tchaikovsky, and neo-just-about-everybody-to which they were accustomed. For Mandel, several lean years passed before he was asked to score *The Sandpiper*. Although it was the best score he could come out of Hollywood last year, Maurice Jarre’s very ordinary score for *Doctor Zhivago* won this year’s Academy Award. Mandel, however, got one for the best song—*The Shadow of Your Smile*, from *The Sandpiper*—and that is enough to open up for him all the work he needs.

But there is an irony in the acceptance at last of jazz and popular music in Hollywood scores. Hollywood is doing this the way it does everything—that is, overdoing it. Of the ten soundtrack albums sold during the popular music in motion-pictures, instead of the neo-Ravel, neo-Tchaikovsky, and neo-just-about-everybody-to which they were accustomed. For Mandel, several lean years passed before he was asked to score *The Sandpiper*. Although it was the best score he could come out of Hollywood last year, Maurice Jarre’s very ordinary score for *Doctor Zhivago* won this year’s Academy Award. Mandel, however, got one for the best song—*The Shadow of Your Smile*, from *The Sandpiper*—and that is enough to open up for him all the work he needs.

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assignment for Jones—Mirage and Th. Pawabrother were its predecessors—and the most successful of the three, perhaps because the picture allows a broader scope in terms of mood. I only wish the score had been better played: the brass is slurred in places, the strings harsh at times. But there is no faulting the writing itself.

That, then, is the current crop of film-score discs. Most of them run together in my mind in one long flood of mediocrity, of effect-seeking with precious little finding. Only The Oscar holds up as pleasant listening, only The Sleuth Thread as interesting and stimulating. For the rest, forget it. They were in the can, and re-issuable, and helped to exploit the pictures with which they were connected. That was their function, and presumably, they served it, as music, they have almost no value whatever. Will Hollywood quickly work into depletion the jazz and pop influences that have only recently begun to freshen its music? Are we in for another round of nice sincere mediocrity? Will the Academy ever give an award to a good score?

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**NEAL HEFTI:** *Boeing Boeing, Orchestra, Neal Hefti cond. Original sound-track recording. RCA Victor LSO 1211 $5.79, LOC 1211* $4.79.

**NEAL HEFTI:** *Lord Love a Duck, Orchestra, Neal Hefti cond. Original sound-track recording. United Artists UAS 5137 $5.79, UA 4137 $4.79.


**JOHN BARRY:** *Thunderball, Orchestra, John Barry cond. Original sound-track recording. United Artists UAS 5132 $5.79, UA 4132* $4.79.

**JOHN BARRY:** *The Chant, Orchestra, John Barry cond. Original sound-track recording. Columbia OS 2960 $5.79, OL 6560 $4.79.

**PERCY FAITH:** *The Oscar, Orchestra, Percy Faith cond. Original sound-track recording. Columbia OS 2950 $5.79, OL 6550 $4.79.

**SOL KAPLAN:** *The Spy Who Came in from the Cold, Orchestra, Sol Kaplan cond. Original sound-track recording. Columbia OS 2950 $5.79, OL 6550 $4.79.

**MAURICE JARRE:** *Doctor Zhivago, Orchestra, Maurice Jarre cond. Original sound-track recording. MGM S 16607 $7.59, S 16607 $7.49.

**QUINCY JONES:** *The Sleuth Thread, Orchestra, Quincy Jones cond. Original sound-track recording. Mercury SR 61070 $4.79, MG 21070* $3.79.

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**JAZZ**

**RECORDING OF SPECIAL MERIT**

© © CHICO HAMILTON: *El Chico*. Chico Hamilton (drums); Jimmy Cheatham (trombone); Al Stintron (bass); Sadao Watanabe (alto saxophone and flute); Gabor Szabo (guitar); Victor Pantoja and Willie Bobo (Latin percussion). *El Chico; Heleno: Mercedez: Strange; This Dream*; and three others. IMPULSE AS 9102 $5.79, A 9102* $4.79.

Performance: Excellent  
Recording: Excellent  
Stereo Quality: Very good

Another album by Chico Hamilton, who is, judging from the cover, the last of the great snappy drummers. Although Hamilton's groups have always had a distinctive sound, the distinction seems never to come from Hamilton himself, but rather from one or another of his sidemen—Fred Katz, Jim Hall, Eric Dolphy, Charles Lloyd.

The man of distinction in this instance is guitarist Gabor Szabo, whom I find to be one of the most unusual musicians to come along in recent years. The striking thing about Szabo is his sound, a marvelous twang with an unusual use of open harmonics. In fact, harmony and twang is all with Szabo—he is kind of a gypsy Duane Eddy. His limitations are that he is not much of a melodist, and he tends to rely a bit too much on that one thing he does. Still, his most striking feature number on this set, *People*, is one of the most sinuously affecting jazz recordings I've heard in a very long time.

Elsewhere, the thing is rhythm, particularly on *Conquistadores*, a highly exciting piece, and on *El Moors*, where Hamilton shows once again that he can handle mallets with more subtle diversity than anyone else in the business. J. G.

**BILLIE HOLIDAY:** *The Golden Years/Volume II* (see Best of the Month, page 57)

**RECORDING OF SPECIAL MERIT**

© © GARY McFARLAND: *Tijuana Jazz*. Gary McFarland (marimba); Clark Terry, Joe Newman (trumpets); Bob Brookmeyer (trombone); Barry Galbraith (guitar); Toots Thielemans (guitar, harmonica); Bob Bishnell (Fender bass); Grady Tate, Mel Lewis (drums). *Tijuana: Marchei: Mexican Rose: Acapulco at Night: Soul Bird*; and seven others. IMPULSE AS 9104 $5.79, A 9104* $4.79.

Performance: Superior  
Recording: Excellent  
Stereo Quality: Excellent

The coarsening of a musical idea to make it more commercial is far too common a practice. What Gary McFarland has accomplished with his new album, *"Tijuana Jazz*.
This is saxophonist Gerry Mulligan's first selection on clarinet. The later departure with string backgrounds and the first from his previous recorded work is by far the more interesting musically. As a clarinetist, he plays in the flowing, warm-toned tradition of the creole New Orleans clarinetists although in a modern idiom with echoes of the swing era. On a song like his own tender The Lonely Night, Mulligan reveals a more intimate lyricism on clarinet than he has been able to achieve on the baritone saxophone. His baritone playing in this set, however, is light-hearted and among his best work on that instrument in the past couple of years. Julian Lee's scoring for strings is discreet and attractive.

**RECORDING OF SPECIAL MERIT**

- **GERRY MULLIGAN: Feelin' Good**
- **ARTHUR PRYSOCK/COUNT BASIE: Arthur Prysick (vocals); Count Basie band. Ain't No Use; Come Home; I Wonder 'Boot You; I'm Late; and eleven others.**

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(Continued on next page)
SPOKEN WORD

AMERICAN INDIAN TALES FOR CHILDREN, Volume Two. Anne Pellowski (reader). CMS 501 $5.79.

Performance: Charming
Recording: Satisfactory

This is Miss Pellowski's second album, and she certainly has a way about her as a storyteller. The secret, I think, is in her unaffected, level, yet never monotonous delivery. I am sure that her tiny listeners, who turn up in droves to hear her at various library branches and parks in New York City, are as mesmerized by her simple charm as I am.

Continuing in the spirit of her first record, she turns her attention here to various Indian legends about why coyotes howl, a boy named Bluejay who visits his sister in a town that turns out to be the afterworld, a love affair between the wind and a spirit's daughter, and how a proud and wily fellow defeats the lethal intentions of a snow man. With this disc, any nursery can be a place as special and spooky as a campfire.


Performance: Natural
Recording: Clear

It is very easy to like the poetry and personality of John Hollander, but I don't think this should be held against him. He is young (thirty-seven, which makes him practically a juvenile compared to the hoary figures who dominate this Yale Series of Recorded Poets). He reads his work in a relaxed, conversational New York drawl, but he is capable of a surprising switch to solemnity and strength when a line calls for it. He writes in a forthright lyrical style. His subject is usually innocence—innocence stained, slaughtered, eroded, or gobbled up by the imanical forces of time or brutish environment. His polished stanzas are illuminated by sudden, brilliant insights and paradoxes.

His most exciting poems are fables, such as "A Lion Named Passion," where the modem city becomes a savage, slavering beast "pawing the yielding earth" and devouring the children in its streets. Another is "The Fable of the Bears in Winter," in which the innocent bears, who might "break the heart of God" are kept from the honey they desire by a cruel padlock of ice. Other poems, such as "The Sundial" and "Late August on the Lido," mourn the vanishing glory of Europe. Yet Hollander's sights are never sentimental. He seems cheerfully ready to wait for the "moments of light" that bless a menaced existence.


Performance: Annoyingly not Shakespearean
Recording: Unusually unattractive.

While reserving judgment on the aural qualities of the recording, it is hard to find fault with the actors. They do not seem to be aware of the comic possibilities of the play, or they are not aware of how to exploit them vocally and physically. Much Ado About Nothing is not a play for listeners; it is a play for actors, and none of the actors in this recording seem to realize it. The result is an odd and uncomfortable experience, and it is difficult to recommend the record to anyone but Shakespeare enthusiasts.

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CIRCLE NO. 8 ON READER SERVICE CARD
HI-FI/Stereo Review
The "merry war" in this wild play between Beatrice, the niece of the Governor of Messina, and Benedick, "a young nobleman of Florence," is the mainspring of a complicated plot mechanism providing the excuse for some of the most dazzling dialogue in the whole Shakespearean repertory. In a choice production issued by Caedmon a few years ago, Rex Harrison as Benedick and his wife Rachel Roberts as Beatrice seemed choice production issued by Caedmon a few to Sicily in the nineteenth century, invited Robert Graves to clear up some muddly lines and arid expressions (let the pedants shudder!), depicted the action out with a real score by Nino Rota instead of the usual anemic "incidental music," and allowed the broad vaudeville of the play's toy-theater situations to provide a gaudier backdrop for the flash of wit between Beatrice and Benedick than ever before. Robert Stephens, miscast as a somewhat histrionic young nobleman named Claudio in the Caedmon album, comes into his own this time as Benedick himself, and Maggie Smith is the sauciest, sharpest, most stingy Beatrice imaginable. The hilarity, in Zeffirelli's irreverent approach, comes from unexpected sources: for example, Albert Finney clowning through the role of Don Pedro in a preposterous Italian accent, concocting little Mafia-like intrigues with his "barest brother," Don John.

In order to achieve a vivid theatrical sense for this production, RCA set up a studio in London with hidden super-sensitive microphones and invited the cast to move about with complete freedom of action. The results swept the listener in with a tremendous sense of sumptuousness and spontaneity, and the hours fly.

The late Miss Sitwell's "image" in this country, which she herself played no small part in helping to promote, has been that of a boundlessly eccentric lady, whose person and poems were bedecked and bejewelled beyond absurdity—novel and diverting to be sure, but never to be considered seriously. That examples of her more serious work are now being heard on records may, belatedly, encourage a growing public to assess her work more fairly. "Still Falls The Rain" and "Dirge for the New Sunrise," solemn verses of indignation over war and suffering, are both read on this disc with feeling and eloquence. Not that all is solemn in this collection, which was performed for a New York audience who responded with hilarity to "On the Vanity of Human Aspirations," about a lady who falls out of a "family tree," a comic portrait of a Sieberian forebear called "Colonel Fantock"; and eight poems from "Fabric.

Here two great interpreters make the most of those experiments in the sound of language which lampoon all the varieties of human arrogance and pretension from the tango to high fashion. The spiciness of William Walton's exaltating score is missing, but the actors get all there is out of the texts, especially when they join in strophic duets as in the "Waltz" and "I Do Like to be Beside the Seaside." P. K.
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The complete Tenth Symphony of Gustav Mahler in the performing version (i.e., reconstruction) by Deryck Cooke is an exciting and moving experience. And this performance by Ormandy and the Philadelphia Orchestra is extraordinarily effective in communicating the world-weary state of mind of the composer during the period 1910-1911, just before he died. Thus this recording should be considered a document of extreme importance. Unfortunately, the sonic processing of the tape version is terribly disappointing. Comparison between disc and tape versions reveals the latter's defects. In almost all the louder passages, what emerges clearly from the disc is distorted on the reel; the latter seems to have undergone an upper-mid-range boost, causing shrillness in the strings; and even the sonorous bass-drum passage at the start of the finale does not have the solidity one hears on the disc. It is too bad that Columbia did not choose the 7½ ips speed for this release, for the lower price in this case—the tape is actually less expensive than the two-disc set—hardly compensates for the drop in sonic quality. I. K.
It is a fact that each reel of Sony Professional Recording Tape contains two "easy threader" tabs which make any tape reel instantly and effortlessly self-threading. But Sony (maker of the best-selling tape recorders in the world) also makes the world's finest recording tape. And we'd rather have you buy it for that reason!

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**RECORDING OF SPECIAL MERIT**


Atolian: ASO.

Performance: Brilliant in moderns Recording: Impressive at times Stereo Quality: Very Effective Speed and Playing Time: 7½ ips; 60' 12"

Despite a good deal of extrafineous noise at times and a volume level in the Handel concerto that seems considerably above that of the rest of the tape, this reel has more than its share of impressive moments. One example is the full-blooded clarity and rhythmic tension built up by Miss Crozier in the Louis Couperin chaconne. However, it is in the modern pieces—by Marcel Dupré, Herman Berlinski, and Leo Sowerby—that Miss Crozier shines, by dint of brilliance of execution, exciting rhythmic articulation, and canny choice of registration. The highly evocative Burning Bach by the American composer Herman Berlinski I regard as something of a find. I'd acquire this tape for the modern side and for the full and beautifully directed steel string sonority of its best parts—good solo organ tapes in four-track format are none too plentiful. Incidentally, this is the third four-track tape in the Aeolian-Skinner series intended to demonstrate the modern classic-style organs built by that celebrated firm. The one before this reel, in Harry S. Truman's home town of Independence, Missouri, is a most impressive example, both for its clarity and for its sonority. D. H.

**ENTERTAINMENT**

**Paul Butterfield Blues Band.** Paul Butterfield (vocals, harmonica), Mike Bloomfield (slide guitar), Elvin Bishop (rhythm guitar), Jerome Arnold (bass), Sam Lay (drums). Mark Naftalin (organ). Blues With a Feeling; Mellow Down Easy; Look Over Yonder Wall and eight others. Elektra EKTP 7294 $7.95

Performance: Energetic Recording: Poor Stereo Quality: Fair Speed and Playing Time: 7½ ips; 36'15"

An aggregation with too many country blues bands is poor musicianship: sloppy arrangements and clumsy, repetitive techniques. But when such music is played well, it's exciting. Paul Butterfield, a twenty-three-year-old singer and harmonica player, is among the best white blues performers I've heard. He plays with more than the four or five tones to which most harmonica players are limited, and he sings with excellent time and a suitable grittiness.

The six-man band Butterfield has put together plays tightly and well. The best track is Born in Chicago, on which Butterfield does his best singing. Unfortunately, the album is poorly recorded. Sam Lay's vocal on I Got My Mojo Working is completely lost. Nevertheless, if country blues is your groove, and you can get past lousy engineering, you'll find this a first-rate album. M. A.

**DUKES OF DIXIELAND: Live!** at Bourbon Street (Chicago). Frank Assunto (trumpet, vocal); Papa Jac Assunto (trombone, banjo); Dave Remington (trombone); Jerry Fuller (clarinet); Gene Schroeder (piano); Rudolph "Red" Brown (bass); Barrett Deems (drums). China Boy: High Society: Bourbon Street Blues: and nine others. Decca ST74 4053 $7.95

Performance: Entertaining Recording: Good Stereo Quality: Good Speed and Playing Time: 7½ ips; 31'38"

In this album, the Dukes of Dixieland add several current songs to their repertoire, and it's interesting to hear how well these songs work within the New Orleans idiom. For instance, who'd have thought of Michel Legrand's love theme from Umbrellas of Cherbourg? I'll Walk My Baby Back to You, as a candidate for Dixieland? Or Mancini's Charade? But they both work well. Also included is the more recent Hello, Dolly! (a song which may still thrill you but has long since worn me out). Don't panic. Several traditional Dixieland numbers are played, too, such as Band of Gold; Bourbon Street Blues and 5-o'clock Rampant Street Parade.

The Dukes of Dixieland are all fine musicians. Their charts are well chosen and well written. What's more, lead man Frank Assunto sings extremely well. His version of Do You Know What It Means to Miss New Orleans? is a knock-out. Blame it on my youth, but I'm not a great Dixieland fan; however, this album delighted me. M. A.
VINCE GUARALDI TRIO: Jazz Impressions of Black Orpheus, Vince Guaraldi (piano), Monte Budwig (bass), Colin Bailey (drums). Samba de Orpheus; Manha de Carnaval; Since I Fell for You; and five others. FANTASY FTC 8089 $5.95.

Performance: Excellent Recording: Good Stereo Quality: Good Speed and Playing Time: 3¾ ips; 39'77"

Few musicians, Brazilian or American, are completely free in both jazz and bossa nova tempos. The stresses of the two kinds of rhythm are subtly but totally different. Since many players don’t seem to realize this, we are subjected to a lot of stiff American bossa nova and some strange-sounding Brazilian jazz.

This album (now released on tape from an earlier disc), to my mind, is a rare example of jazz musicians approaching Brazilian music properly, Vince Guaraldi, an excellent pianist to begin with, has not tried to be a Brazilian. Instead, he has extracted the exquisite beauty of Antonio Carlos Jobim and Luiz Bonfá’s music for the film Black Orpheus and translated it into the rhythmic structures with which he is most at home: those of jazz. Nothing is lost, and much is sensitively gained. By far my favorite track is the lovely Manha de Carnaval. Several of the tracks are standards or jazz tunes, and all are played well, especially P’vine River. Budwig and Colin Bailey are responsive throughout.

RECORDING OF SPECIAL MERIT

LENA HORNE: Feelin’ Good. Lena Horne (vocals); orchestra, Ray Ellis cond. I Wanna Be Around; Who Can I Turn To?; Willow Weep for Me; and nine others. UNARTISTS UAX 6433 $5.95.

Performance: Excellent Recording: Excellent Stereo Quality: Excellent Speed and Playing Time: 3¾ ips; 29' 36"

Lena Horne has always been considered a performer one must see to appreciate. I liked her before I ever saw her work (which was only a few years ago), and since then I’ve liked her records even more. She has one unattractive mannerism—a coyness, as though her voice were puckering up—but despite it, this lady is one of my favorite singers.

In this album, Miss Horne is, if possible, more graceful than ever. Time passes, and she wears it better than any performer I can think of. (Have you seen her lately? That’s a grandmother?) Her readings of songs like Feelin’ Good and Softly As I Leave You have a warmth one simply doesn’t hear in youthful singers, no matter how well they sing. Ray Ellis’ arrangements are all lovely. I suppose this is the finest example of pop recording I’ve yet heard. The balance and blend are thrilling. M. A.

CLAUS OGERMAN ORCHESTRA: Watusi Trumpets. Orchestra, Claus Ogerman cond. It’s Not Unusual; Downtown; La Bamba; and nine others. RCA VICTOR FTP 1316 $6.95.

Performance: Professional Recording: Good Stereo Quality: Good Speed and Playing Time: 7½ ips; 25'56"

Arranger Claus Ogerman is an extremely accomplished musician. He has been responsible for some of the loveliest arrangements put on record, such as those for the new album of Bill Evans with symphony orchestra and the recent João Donato disc.

Mr. Ogerman is also a businessman, and is able to write like one. This album, “Watusi Trumpets” is dedicated to business. Mr. Ogerman has written arrangements of current pop hits for brass orchestra and aimed them at the dancer’s market. They are played with skill by the best studio musicians in town. It’s a nice, neat package, but it’s bloodless.

RECORDING OF SPECIAL MERIT

OSCAR PETERSON TRIO: With Respect to Nat. Oscar Peterson (vocals, piano); Ray Brown (bass); Herb Ellis (guitar); orchestra, Manny Albam cond. Sweet Lorainne; Little Girl; Gee Baby, Ain’t I Good to You; and nine others. LIMELIGHT LLX 86029 $5.95.

Performance: Warm Recording: Very good Stereo Quality: Very good Speed and Playing Time: 3¾ ips; 29' 37"

This album is a singularly gracious tribute by Oscar Peterson to his late friend Nat Cole. Though Peterson is known primarily as a pianist (he was not originally), it happens that his voice bears an amazing similarity to Cole’s, as does his musical taste.

Peterson performs twelve Nat Cole standards, eleven of which are vocals. Despite the similarity of his singing to Cole’s, and there are differences, this is no imitation-Cole album. On about half the tracks, Peterson performs with his piano-bass-guitar trio. Once again, the Peterson trio is reminiscent of, but not dependent on, the famed Nat Cole trio, to whom the work is dedicated. In fact, it’s remarkable how Peterson has stayed true to the Cole flavor yet unmistakably himself.

On the several tracks employing a big band, Manny Albam’s arrangements are superb (my favorites are Orange-Colored Sky and Calypso Blues), and have been beauti-
FULLY recorded by engineer Phil Ramone. This is a one-of-a-kind performance. The tape is highly recommended. M. A.

**FILM MUSIC**

**RECORDING OF SPECIAL MERIT**

© THE WIZARD OF OZ (Harold Arlen-E. Y. Harburg). Original sound-track recording. Judy Garland; Ray Bolger; Bert Lahr; Jack Haley (vocals); orchestra and chorus. *Over the Rainbow; munchkinland; Diag-Dorg, the Witch is Dead; If I Only Had a Brain; We're Off To See the Wizard; If I Were King of the Forest; The Merry Old Land of Oz.* M.G.M. STX 3906 $7.95.

Performance: Captivating
Recording: Located at good
Stereo Quality: False
Speed and Playing Time: 3¼ ips; 42' 22"

The reissue on tape of the sound track of *The Wizard of Oz* provides an opportunity to do a retrospective on the career of Judy Garland, one that I think is in order in view of the flood of letters provoked by my recent review of her album (with daughter Liza Minnelli) recorded at the London Palladium. After the uncertain and juicily sentimental performances of the present-day Miss Garland, the remarkable sound-track of this film serves to put things in perspective: this woman was a superbly talented teenager. The problems of her private life obviously contributed considerably to the decay of her talent, but amateur psychology is not a part of criticism; criticism can merely note that her talent has deteriorated in the twentieth years since the sound track of *The Wizard of Oz* was made.

In point of fact, it is only by the youthfulness of her voice that a first-time listener would know that Miss Garland was an adolescent when she first sang *Over the Rainbow*: She was already a finished artist. This astonishingly moving performance can and does put a lump in my throat. Miss Garland's contemporary reprises of the song don't.

Yet Oz was not a one-woman show. There are unforgettable performances on this tape by Bert Lahr (whose *If I Were King of the Forest* is the definitive put-on of opera singers) and Ray Bolger and Jack Haley.

The tape is not all music—there are stretches of dialogue that are almost like music in themselves. Particularly notable is the scene in which Miss Garland discovers that the wizard is a fraud. She tells the late Frank Morgan, who played the wizard, "You're a very bad man." Who can forget Morgan's hesitant, cracked-voice delivery as he replies, "Oh no, my dear. I'm a very good man—just a very bad wizard."

Miss Garland's voice in those days was an unusually sensitive instrument. Its quality was clear and clean, and it bore emotion effortlessly: the pushed, exaggerated histronics of her later years are nowhere in evidence in this recording. It is the memory of this early quality, perhaps, that her fans have in mind, rather than present merit, when they go so earnestly into battle to defend their Poor Judy.

G. L.
CLASSROOM TAPES

"What is Beethoven going to do now?" asked the instructor as he engaged the pause control on the classroom tape recorder. He had interrupted the Titan exactly at the point of greatest musical tension and did so with a precision hitherto possible only for live performers. With a few swift comments and a reference to an example on the blackboard he summed up the situation, and when he restored tape motion, the instructor had opened up for his students a whole new dimension of musical appreciation.

Not too long ago, teachers had to scratch their way across dozens of discs hunting for illustrative passages for their classes. Now, with tape, they can start and stop the music wherever they wish without jarring their listeners; they can splice together diverse musical examples to compare at close range brief snatches of themes usually buried in the middle of long works. Formerly, if you wanted to compare passages in two compositions you had to be able to read a score, or you had to have an experienced memory to store up the first passage until the second one came around. Today, in any well-equipped music classroom, the teacher can supplement his lecture with tapes that contain any number of illustrative snippets as well as complete works, and everybody takes this for granted—except the old-timers who remember when they had to play all their examples on the piano.

Tape has done more to revolutionize the teaching of music than any other gadget stemming from Thomas Edison's sober recitation of "Mary had a little lamb." Having prepared the tape in the quiet of his own study, the teacher can now spend most of his time in the classroom actually teaching, instead of juggling discs and tone arms or struggling with piano transcriptions of works composed for other instruments. As for complete works, which formerly were only excerpted in class, they can now be placed on the students' outside-listening assignments. And the advent of tape has done great things for learning outside the classroom. When today's music appreciation student reports to the listening rooms to hear the works assigned by his teacher, in many schools he can sit down in any vacant booth, put on the headphones, and simply did that day's assignment.

Because of the relative ease of making and shipping tape recordings, schools are able to include in their collections performances of works that are not generally available to the public. For example, one college I know of was able to secure from Radio Finland tapes of performances of some compositions by Sibelius that have never been available in this country on commercial discs or tapes.

The use of tape as a teaching aid is not limited to classes in music appreciation or music history. It is invaluable in training those students of music who are preparing for careers as performers, particularly singers. And, of course, it is not limited to education at the college or conservatory level. Some of the most imaginative work with tape recording is being done with teaching part singing to children in elementary schools. And what I've heard about the use of tape recorders in helping children to overcome pitch problems sounds exciting enough to make me want to go back to school and start all over again.
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Nine out of ten musicians prefer the natural sound of Pickering.

Microgroove discs are recorded by magnetic processes. Naturally they sound better when reproduced with a Pickering Micro-Magnetic; there's a natural compatibility. From the tiniest peep of a piccolo to the mightiest roar of an organ, Pickering produces sound as natural as the original performance. That's why musicians prefer Pickering. And so does everyone else who can hear the difference.

Pickering makes it easy to get natural sound in any stereo installation. There are four Pickering Micro-Magnetic pickups, each designed for a specific application. The V-15AC-2 is for conventional record changers, where high output and heavier tracking forces are required. The V-15AT-2 is for lighter tracking in the newer automatic turntables. The even more compliant V-15AM-1 is ideal for professional-type manual turntables. And the V-15AME-1 with elliptical stylus is the choice of the technical sophisticate who demands the last word in tracking ability.

But the ultimate test of a cartridge is the human ear. Find out for yourself. Listen carefully to a Pickering. You'll hear the difference.
Why turn off your love of good music when you shut your living room door? Summer or winter, indoors or out, from beach to mountaintop, from patio to summer home — the Electro-Voice Sonocaster I puts good music where it belongs . . . with you.

It’s built to take any weather. The one-piece housing can’t rust, crack, or peel — the color is molded right into the plastic. And tough? Just ask the schools, radio stations, and businesses that find a Sonocaster ideal for portable high fidelity sound.

Now how about the music? Well, short of 32' organ pipes (which the Sonocaster frankly ignores) you’ll be hard pressed to hear any trace of “portable” sound. Whether you add Sonocasters to your main hi-fi system, or start with a portable radio, you’ll find these small speakers uncommonly responsive.

Hookup is easy. Plug the Sonocaster directly into the auxiliary jack on most portables. Or add a pair to your main stereo system in moments with just a screwdriver.

Pick up the Sonocaster I today. It costs no more than $25.00 at leading audio showrooms everywhere. And now, a little traveling music, if you please!

Who says Hi-Fi is a winter sport?

Who says Hi-Fi is a winter sport?