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DIONEER STERED RECEIVER MODEL SX-1250

SP-A SP-B SP-C



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SIGNAL

\* 160 watts per channel minimum RM<mark>S continuous</mark> power output at 8 ohms, from 20 to 20,000 Hz, with no more than 0.1% total harmonic distortion.

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And weigh your decision carefully.

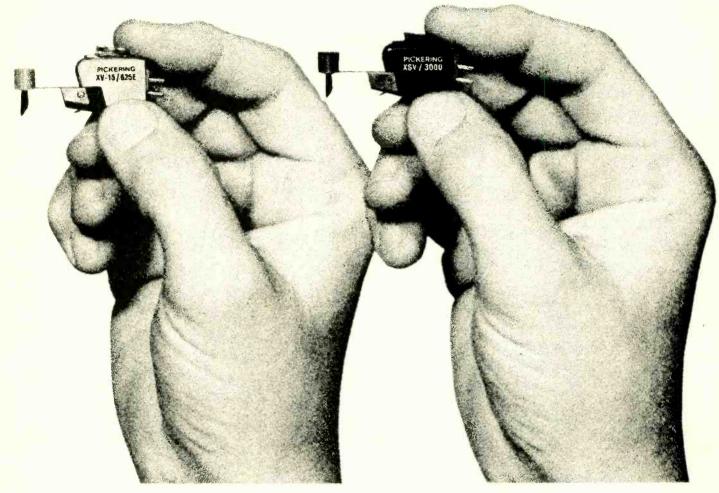


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CIRCLE 25 ON READER-SERVICE CARD



AUGUST 1977 VOLUME 27, NUMBER 8

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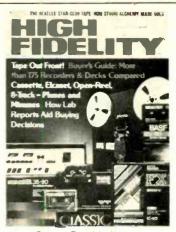
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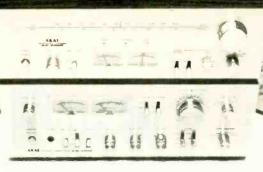
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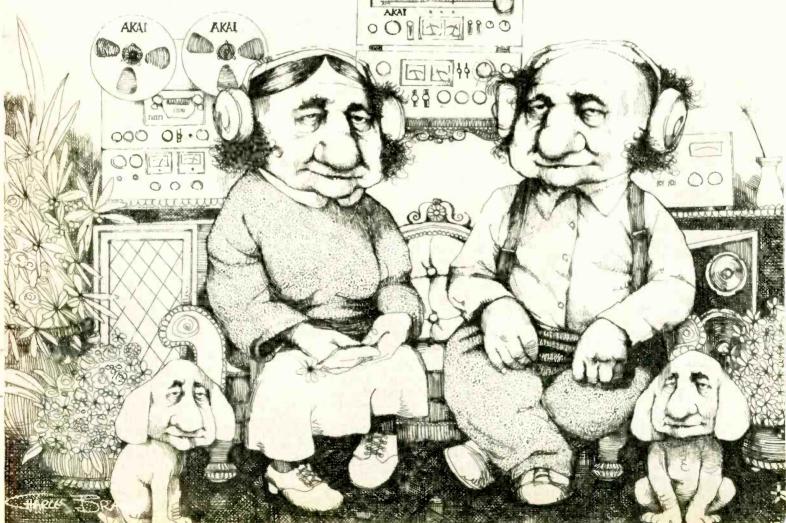
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#### COMING NEXT MONTH

Our forthcoming issue is a Forthcoming Issue, our annual September preview of Next Year's New Equipment and The Coming Season's Record Releases. A survey of Million-Seller Records not only will tell what they were (and are), but will analyze why they became such big hits, describe what was actually in it for the songwriters involved, and give some hints in case you want to try your hand. In Régine Crespin Speaks Her Mind, the famed diva tells us why she can't be friendly with other sopranos, why a prima donna's entourage contains so many gays, how she felt when her voice stopped "going well" and what she did about it, and what her recording plans are. We will review her latest Offenbach operetta too. Plus the regulars, including John Culshaw's visit to his friend Benjamin Britten's grave.

#### SOLUTION TO HIFI-CROSTIC NO. 26

[MANFRED F.] BUKOFZER: Music in the Baroque Era [from Monteverdi to Bach]

In the baroque era the social position of the musician was dependent on a patron. Like bakers and tailors, he had to wear livery. Like the rest of the tiers état, musicians were organized in guilds, which regulated training and defined rights and responsibilities.

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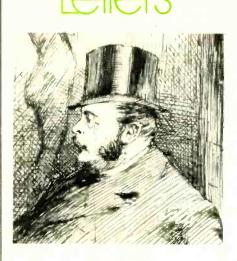
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#### **Gilbert and Sullivan**

Many G&S fans will appreciate Richard Dyer's praise of the early 78-rpm D'Oyly Carte recordings in his Gilbert and Sullivan discography [May]. I hope that other recording companies will see the success that England's Pearl label evidently has had with reissuing these recordings on 33rpm discs.

Mr. Dyer may be interested in a recording of a live performance by Donald Adams of some of Sullivan's songs. It is of note because it contains what are probably the only recordings of several of these songs (among them "Little maid of Arcadee") and also the voices of Gilbert and Sullivan (recorded at different times) reproduced from Edison cylinders. This record, on the Brookledge label (Brookledge Recordings. 929 S. Longwood Ave., Los Angeles, Calif. 90019). cost \$5.00 in 1972 when I saw the ad in "The Savoyard" of the D'Oyly Carte Trust. I have no idea whether or not the company is still in existence. The recording of Sullivan's voice is currently available on The First Recorded Sounds: Original 'Thomas A. Edison Historical Recordings' (Mark 56 723).

Perhaps your next G&S project should be to serialize the Sullivan diaries

David E. Jones Morristown, N.I.

I would like you to know how very much I enjoyed reading the first part of the Gilbert and Sullivan discography

It has been my good fortune to have known both George Baker and Derek Oldham. Perhaps you are aware that Mr. Baker passed away on January 8, 1976. He is laid to rest in the grounds of Belmont Abbey. approximately twelve miles from his home in Hereford, where he lived in retirement. To his great joy, he was awarded the papal honor of Knight of St. Gregory the autumn before he died.

Howard Thais Indian Harbor Beach, Fla.

I found the Gilbert and Sullivan discography, on the whole, very informative and complete. However, the subjective determinations made by Mr. Dyer of the varied recorded performances need greater scrutiny

The thrust of my disagreement with Mr. Dyer concerns the EMI-Angel versions. There is no question that Sir Malcolm Sargent compiled an all-star cast of significant singers to record this particular series. Gilbert and Sullivan is not, however, grand opera. It is a well-known fact that George Grossmith, who originated most of the light baritone roles, was a singer of mediocre talent. to say the least. Grossmith, like Lytton, Green, Pratt. and Reed who followed him. was chosen primarily for his acting ability and not the quality of his voice. Mr. Dyer specifically refers to the Pearl release "Art of the Savoyard" as being significant. A careful listening to that recording indicates that Richard Temple (who originated the Mikado), Scott Russell (principal tenor in Utopia Limited), and Walter Passmore (originator of the Grand Duke) had very limited vocal talents. The recordings of Martyn Green and John Reed, which seem to be uniformly down-rated by Mr. Dyer. are representative of the works as performed and are infinitely more pleasing than the EMI series of all-stars. The meshing of the various D'Oyly Carte regulars on even the most modern series provides a continuity of performance and an appropriate "chemistry" that works, something seriously lacking in the EMI-Angel recordings.

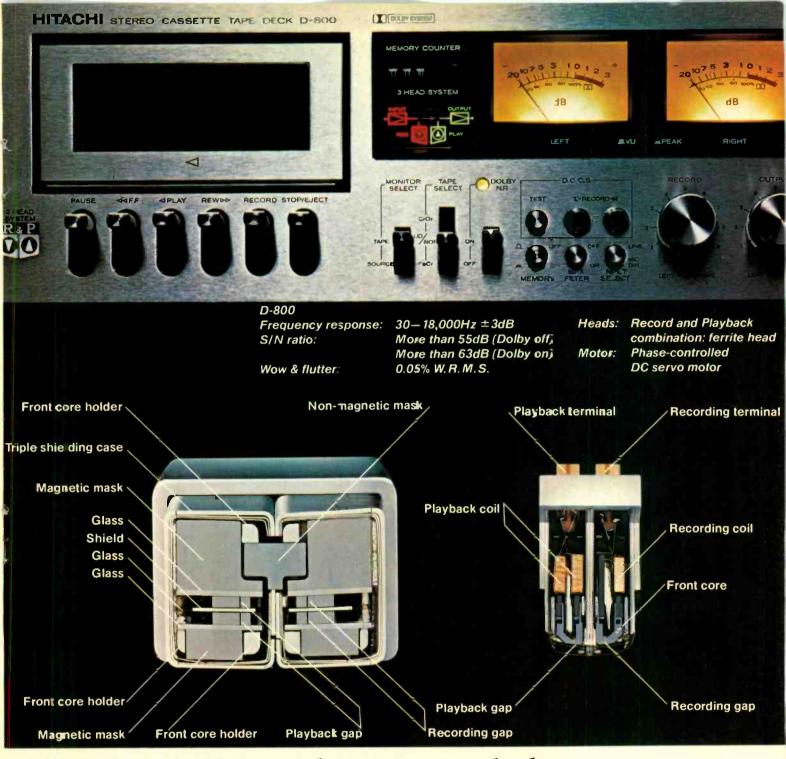
> Alvin E. Entin Miami. Fla.

#### Whose Le Cid?

Dale Harris' review of the Columbia recording of Massenet's Le Cid [March] 1 conducted is inaccurate and so misrepresents our effort that I feel obliged to the tens of thousands of people who have purchased the recording not to allow it to remain unanswered.

The reviewer's most blatant misstatements occur in his discussion of the aria "O souverain, o juge, o père." He says that Placido Domingo interpolated a high B at the end of the aria. This is not so, nor could it be, since the aria ends on an A-flat major chord. He also indicates-calling it "an artistic outrage"-that a fortissimo climax was "cobbled into the score" near the end of the aria. The reviewer is wrong. The score has a printed fortissimo on the chord in question, and that is the way it was performed. The only changes in this aria are minor word rearrangements to facilitate vowel sounds and the fact that Mr. Domingo sings along with the chorus during the second half of the aria. The final note he sings, an A flat, duplicates exactly the note of the sopranos in the chorus.

There are just two other note changes in the entire recording, one a higher note interpolated by Paul Plishka at the end of his aria, and the other a higher note taken by Grace Bumbry at the climax of an ensemble in which she is joined by the entire cast and chorus. These were inserted by Miss Bumbry and Mr. Plishka in moments of exhilaration in performance. I felt it would be more honest to leave them on the recording so that listeners would have a better feel of what actually took place during the live concert.



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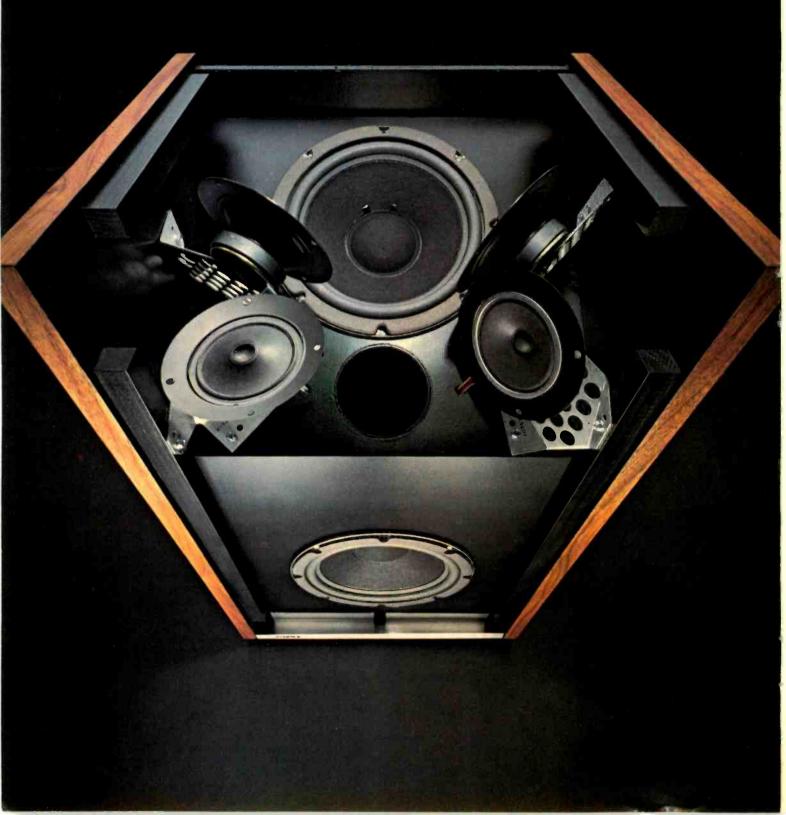
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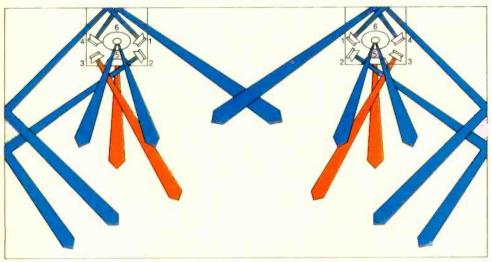
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Better sound through research

The reviewer next takes us to task for the performers' French diction. Candidly, there are errors, but to dwell as the reviewer did on isolated examples gives an exaggerated impression of their impact on the over-all performance. Miss Bumbry. Mr. Domingo, and Mr. Plishka sing extensively in French and in France. Their French diction is a well-known and accepted commodity. (What is there about a French opera that requires reviewers to analyze a performer's diction through a microscope?) It must be said that the reviewer in his comments on this subject has complimented one performer whose French diction was the least good and made no mention of a performer whose diction was beyond reproach.

Finally, you have classified this recording an abridgment. This is not so. The reviewer, in listing the cuts, intimates that the record buyer is not hearing the opera as Massenet wrote it. Had he only played the music that was omitted, he would have observed that ten minutes or less out of one hundred and sixty minutes of music was cut. I cannot tell you the number of times I played the omitted music on the piano and in my mind's ear before making a final decision. These cuts, I believe, are justified and in fact strengthen the opera. The reviewer is within his rights to regret their omission. but he should not criticize making these cuts unless he is prepared to defend the value of the music that was omitted. On this, his review is silent.

Mr. Harris neglected to comment on the fact that this is a debut recording for the

Opera Orchestra and its conductor, on the concept of recording live performances, or that a method now exists by which operas once again can be recorded in the United States. I cannot glean, after reading this review, the basis for this reviewer maligning my musical integrity. I feel a very strong obligation to the composers I play and to the audiences who attend my concerts. I do not rewrite a composer's music, and if this reviewer insists on accusing me of it, he should have been better prepared to back it up.

To those who have purchased this Le Cid recording and are enjoying it, I would like to tell you that you definitely are hearing the opera as Massenet intended it. Continue to enjoy this beautiful music. It was performed for you with the greatest care and affection.

Eve Queler Music Director Opera Orchestra of New York New York, N.Y.

Mr. Harris replies: I too share Ms. Queler's sense of obligation to the record-buying public. What I do not share is her disdain for the truth.

First I must acknowledge one correction: The high note in "O souverain. ô juge, ô père!" is indeed an A flat. (Earlier in the scena Massenet asks Rodrigue to ascend to a high B flat at the beginning of the phrase "Ta seule image est dans mon âme.") No doubt my lapse is attributable to the strong emotion aroused in me by what, on rehearing, I can only in all conscience continue to call "an artistic outrage"-namely, Ms. Queler's wanton disregard of the composer's intentions.

These are clearly revealed in the Hartmann piano-vocal score 1 have before me as 1 write. On page 298 Massenet asks Rodrigue (Domingo) to sing the phrase "à moi!" softly on E flat and then to fall silent until page 300, where he repeats the word "vainqueur!", first on E flat and then louder on F-after which he falls silent again, leaving the musical climax to the vision of St. James. who tells him "Tu seras vainqueur!", backed by a chorus of heavenly voices urging Rodrigue on to victory with the words "Va! Va! Va!"

Poor Massenet did not know how inadequate his ideas were. Ms. Queler, in any case, clearly thinks they were and has rewritten his music accordingly. In same ways more astonishing still. however, is her unwillingness to recognize whot she has committed in the way of musical supererogation.

Let me try to penetrate her self-bemusement. Far from remaining silent between pages 298 and 300 (i.e., between "à moi" and "vainqueur!") Rodrigue "sings along with" the sopranos as they intone "O souverain, ô juge, ô père!", not as a humble chorus member but as an all-obliterating tenor soloist, thus changing the very character of the music and what it is expressing.

Worse follows. For Rodrigue then departs from the chorus music entirely and

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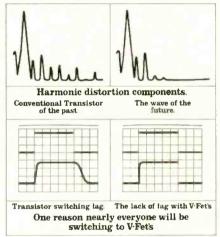
This high speed reaction means also that Fets are extremely efficient and accurate in the high frequency range. Therefore they allow more precise and stable nega-© 1977 Sony Corp. of America. Sony, 9 W. 57 St. N.Y., N.Y. 10019. SONY is a trademark of Sony Corp.

tive feedback, and minimal distortion.

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continues with what is in fact a reprise of his aria: "Ta seule image est dans mon âme/ Que je remets entre tes mains." And where, on page 300, he is supposed to break his silence with "vainqueur! ... vainqueur!" Domingo is allowed to repeat his big tune: "O souverain ... ô juge ..."again, I must emphasize in face of Ms. Queler's assertions, quite independent musically of the chorus, whom he only joins in order to appropriate the sopranos' high A flat. To do this, moreover, he changes the text completely.

That this adds up to what I referred to in my original review as a fortissimo climax cobbled into the score is actually acknowledged in her performance, for she introduces-again in defiance of the printed score-a rest after the tenor's spurious high note and then continues with the diminuendo close of the scena.

Ms. Queler defends the retention of Miss Bumbry's and Mr. Plishka's unwritten high notes on the grounds of honesty. She seems to have forgotten that at the live performance the audience, taking Domingo's high note as the end of the aria, interrupted the performance at this point with an ovation. However, the recording, some of which is obviously indebted to rehearsals or makeup sessions, includes none of the applause and thus misrepresents both the composer's score and what went on at the live performance of it. If all of these changes, moreover, constitute nothing but what Ms. Queler calls "minor word rearrangements," I sincerely hope to be spared anything she concedes to he a major job of revision.

Ms. Queler asserts that I remain silent on my reasons for deploring her cuts, when I complained that they "[damage] the work's proportions" and make "the final three scenes ... too frenetic to serve as the climax and resolution of the courtly drama."

And how, may I ask, does Ms. Queler know with such certainty that I did not examine the 637 bars she has omitted? If this music in her opinion takes so short a time to perform, what purpose. I cannot help asking, is served by cutting it? To repeat myself, "sometime I should like to hear the score Massenet composed."

As for Ms. Queler's self-confessed puzzlement about the importance of correct French pronunciation, all I can say is that if she indeed does not know why it is important she might consider concentrating on the French orchestral repertory and leaving the vocal music alone until she finds out.

Unlike Ms. Queler, I am not in the least interested in the cause of domestic recordings, operatic or otherwise, only in the cause of good recordings, whatever their source. Among the latter species this performance of Le Cid is not, in my opinion, to be numbered.

#### **Backbeat: Kudos and Comments**

As a devotee of classical music, let me be the first to disown people such as Ernest Birchenough and John Dana ["Letters," May] for having found your new BACKBEAT section a threat to their tastes. Not only was Editor Leonard Marcus right to point out that in no way had the amount of space devoted to serious music been diminished by the addition of the new section on pop mu-

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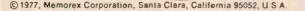
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sic, but neither the title of your magazine, nor that of the other leading audio magazines, implies treatment of classical music exclusively. Indeed, to do justice to the modern recording industry, BACKBEAT was sorely needed. Its inclusion brings your magazine to a new zenith in that respect; no one can now level a charge of "lip service" treatment of any type of recorded music at HIGH FIDELITY.

> leffrey D. Skibbe LaPorte, Ind.

I would like to thank Leonard Marcus for his response to the two letters denigrating BACKBEAT and the magazine's supposed mistake in widening its material. I believe that HIGH FIDELITY is now easily the magazine with the widest appeal for anyone into any type of music and audio.

Especially of interest in BACKBEAT are the articles on the music industry—Jim Melanson's article [May] on the singles charts was well taken, as was Fred Miller's [March] on recording studios. I find the record reviews professional, not like those in "cheaper" periodicals that claim to specialize in this department.

#### S. J. Geller Montreal, Que.

Todd Everett is to be commended for his excellent review of Pink Floyd's new release "Animals" [May]. Pink Floyd is one of the most talented and imaginative groups ever to walk through the studio door. Particularly appreciated is Mr. Everett's praise of guitarist David Gilmour. It's about time

The designers of the state-of-the-art DDX 1000 present a direct drive turntable at less than a third the price: The DD 20.

The Micro Seiki DDX 1000 with its three-tonearm mounts has taken turntable engineering in a new direction for styling and audiophile convenience features.

Now these same minds have engineered a superb direct-drive turntable for \$200 (nationally advertised value).\*



somebody gave him the recognition he deserves.

As avid readers of HIGH FIDELITY for the past two years, we think this review is unsurpassed.

Andy Eck ond Lin Shewbridge Mount Joy. Pa.

Leicester Baines appears to honestly like the Marshall Tucker Band, judging from his review of the album "Carolina Dreams" [June], but because these musicians 1) aren't radical enough, 2) play music that can be whistled or hummed, or 3) are too predictable, he declines to come out with a full-fledged endorsement.

At the age of fifty-four, I have no such compunctions. I wholeheartedly endorse them as a pleasant group to hear and a relief from the sounds produced by the Allmans. It is to be hoped that this will be a trend-setting group.

Don't worry, Mr. Baines, if they have no earthshaking social comment to make. Just sit back and enjoy.

Thomas Coam Wallingford, Conn.

I agree with Todd Everett's statement concerning the potential of Jennifer Warnes in his review of her new album [May]. I first became aware of the young lady who called herself "Jennifer" in 1969, when she was a frequent guest on the Smothers Brothers' program. On their last show she sang a poignant version of "Easy to Be Hard" that showed her potential for becoming a performer who should be taken seriously. Her album should win for her a new audience that will look forward to each new effort, be it an album or single.

R. F. Calandra Peekskill, N.Y.

#### Loudspeaker Curves

I am greatly disappointed that you have stopped showing frequency-response curves in your loudspeaker tests. In my opinion, they are much more useful than the verbal description of the curves that you are now giving.

> James Lin St. Paul, Minn.

Our reason for dropping the curves was that we found them to be too easily subject to misinterpretation.

#### **GE**, Not Bell

While catching up on our reading the other day, we were somewhat surprised by an item in your chronology "100 Years of Sound Reproduction" [January]. One of the listings for 1926 reads: "Rice and Kellogg of Bell Telephone Laboratories receive patent for dynamic loudspeaker." This is incorrect. Rice and Kellogg did their work at the General Electric Research Laboratory, a forerunner of the General Electric Research and Development Center.

Peter Van Avery General Electric Research and Development Center Schenectady, N.Y.



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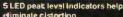
There are no shortcuts. We use the best quality ferric oxide, milled by a patented process, for maximum packing density and uniform coating. We use an exclusive polymer binding, which will never deteriorate and cause frictional noise or wow and flutter. Even our cassette case is different, incorporating our patented Special Mechanism, for years of smooth and dependable tape feed. Compared to most cassettes, it's over-engineering. But what would you prefer to buy ... under-engineering? At BASF, we're purists. We've dedicated the efforts of the world's largest magnetic tape research and development staff to the goal of totally accurate sound. When you use our Studio Series cassettes, we want you to hear nothing ... nothing more than you record, and certainly nothing less.

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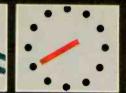
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## 7. The Swing Era

#### by Gene Lees

When are big bands coming back? Next football season. -WOODY HERMAN

ARTIE SHAW came home from World War 11 to form his finest orchestraone of the finest of all the big bands. Alas, it lasted only a little while. Perhaps seeing more clearly than other musicians what lay ahead in the country's culture. Shaw left the business abruptly and permanently. He has said to me that the Swing Era was unique, an aberration, a product of conditions that existed for a short time and cannot be reproduced. All hope for a renaissance of big bands. he has consistently argued, is futile.

Yet nostalgia for the Swing Era is not uncommon in people over forty, which is of course the reason RCA and Reader's Digest keep offering reissue albums from their archives and Time, Inc., sells stereophonic "recreations" of the sounds of that epoch. To hear an American big jazz band strain the walls of a dance or concert hall, without all the paraphernalia of modern electronic amplification, was one of the great thrills in music.

It was indeed a historic musical period, fully as important as those who remember it with affection think it was. But its music, as many seem to have forgotten, was not all unalloyed gold. The era that produced such fine bands as those led by Duke Ellington, Tommy Dorsey, Jimmy Dorsey, Chick Webb, Glenn Gray, Jimmie Lunceford, Count Basie, Lionel Hampton, Benny Goodman, Woody Herman, and Gene Krupa also yielded Kay Kyser, Sammy Kaye, Wayne King, Freddy Martin, Clyde McCoy, and others in that group known to those of fastidious perception as the Mickey Mouse hands.

Down Beat magazine, then an exuberant upstart in music journalism, included a King of Corn category in its annual poll of its readers. Guy Lombardo usually won it. There are those who think the Glenn Miller band belonged in this class, and indeed some of the time it did, thanks in part to its use of clarinet lead on the saxophone section, a much-vaunted sound that was in fact quite cloying. But the band could play jazz of a sort, recorded many instrumentals, and claimed Bobby Hackett, who played guitar and took cornet solos, among its personnel. No other jazz musician of distinction, however, went into the band or came out of it.

Categorizing these groups was neither easy nor clear, since some of the dance bands (that of Charlie Spivak, for example) embodied a high level of musical taste. All the jazz bands played for dancing part of the time: and some of the most egregiously commercial dance bands occasionally put out some very good music. Kyser, whose arrangements were generally intelligent and tasteful, at times startled audiences with quite stimulating ensemble jazz. It was rumored that even the Sammy Kaye band could do it.

The elite of the bands were strongly jazz-oriented and played dance music as a reluctant concession to the exigencies of survival. The best of these best-including Basie, Ellington, Herman, and in my opinion Tommy Dorsey-produced brilliant jazz, framing the work of highly individual soloists in ensemble structures of remarkable discipline and power.

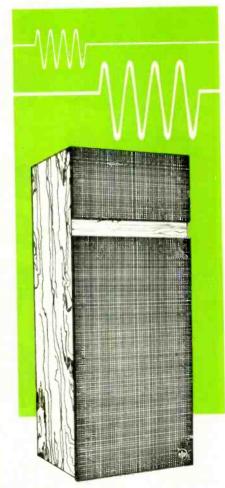
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CIRCLE 37 ON READER-SERVICE CARD

The Les Brown band was perhaps one rung down the ladder from these four "bests." It was essentially a dance band, but it played with a strong jazz inflection and a bouncing two-beat feeling derived in part from Jimmie Lunceford. It had good jazz soloists, such as the late Don Fagerquist, and excellent arrangements by Frank Comstock, among others. It was without doubt the most beautifully polished of all the bands.

The Brown band takes on particular significance if one accepts the judgment of many critics and music historians in excluding it from the category of jazz bands. If it was not a jazz band, then it shows us just how good commercial popular music could be. "Sentimental Journey," on which the voung Doris Day was vocalist, is no doubt the best-remembered of its hits. But Brown also had hits on jazzish instrumentals such as the beautifully written arrangement of "I've Got My Love to Keep Me Warm" and the witty "Bizet Has His Day," with its superb ensemble brass playing and startling modulation on the very last chord.

This was the popular music of the land, as Woody Herman pointed outmusic like "Take the 'A' Train" and "Sophisticated Lady" by Ellington, "Caldonia" and "Your Father's Mustache" by Herman, and "Artistry in Rhythm" by Stan Kenton. This was music you heard on the radio.

Examining Les Brown's "I've Got My Love to Keep Me Warm," we find that it was a melody written by a Jew (Irving Berlin) and performed instrumentally in a manner originated and developed by blacks. And since most of the big bands looked to the Broadway musical stage, to the movies, and to Tin Pan Alley for much of their repertoire, that recording is a sort of microcosm of the era. The bigband era was, in a very real sense, the result of the fusion of the musical influences of two of the most important American minorities, the Jews and the blacks. Without them, there would be no American music-or at least there would not be the distinctive music that became one of the most admired cultural treasures this country has given the world.

The scope and skill of instrumentalists so expanded during the Swing Era that American musicians now are recognized as the best in the world. Even classical musicianship was expanded by the explorations of the period, for some of the brass players, trained to the rigors of jazz-band and danceband ensembles, went into symphony orchestras. This experimental aspect of the era-during which the bands changed greafly in size, structure, and character-will be the subject of next month's column.

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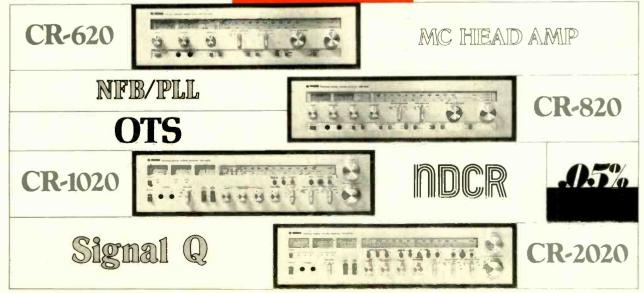
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T	27	U	28	K	29	N	30	С	31	ZZ	32	M	33			E	34	8	35	0	36		1	v	37	Z	38	ZZ	39		100
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N	54	A	55	н	56			L	57	T	58	ZZ	59	к	60			Ë	61	F	62	1		J	63			0	64	ZZ	65
0	66	Ţ	67	L	68	N	69			Р	70	s	71	ZZ	72	С	73		2h	N	74	A	75			0	76	м	77	к	78
E	79	J	80		1	Y	81	в	82	A	83	N	84		13	L	85	V	86		1	G	87	0	88		1	н	89	E	90
R	91	ZZ	92	1	93	J	94	F	95	N	96	w	97	L	98	K	99			ZZ	100	Т	101	в	102			G	103	Р	104
н	105	0	106		1	ZZ	107	E	108	ز	109	N	110	D	111	U	112	A	113	н	114	к	115	L	116	z	117	ZZ	118	Т	119
2		A	120	8	121	J	122	F	123	22	124	T	125	v	126	E	127	1	23	N	128	н	129	zz	130	ŀ	131		.5	x	132
Y	133	ĸ	134	P	135	R	136	ZZ	137			w	138	J	139	E	140	N	141	м	142	22	143	в	144	н	145			S	146
E	147		N.L	T	148	ZZ	149	1	150		. Y	R	151	F	152	w	153	٥	154			н	155			zz	156	E	157	N	158
12.2		0	159	2	160	L	161	V	162	R	163	c	164		1	P	165	N	166	w	167		1	L	168	D	169	G	170	Y	171
J	172	U	173	E	174	ZZ	175			н	176	z	177	ZZ	178	ĸ	179	T	180	٥	181	ZZ	182	E	183	Y	184	3		L	185
v	186			н	187	F	188	в	189	G	190	Y	191	м	192	ZZ	193	R	194	с	195	J	196			£	197	s	198	N	199
ZZ	200	A	201	×	202	н	203	T	204			Y	205	ĸ	206	B	207	P	208	м	209								1.5		

#### DIRECTIONS

To solve these puzzles—and they aren't as tough as they first seem supply as many of the Output words as you can in the numbered dashes following the Input. Unless otherwise specified in the Input, the Output consists of one English word. "Comp." means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row.

Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation — the author and his work — will be spelled out by the first letters in Output, reading down.

The answer to HiFi-Crostic No. 27 will appear in next month's issue of HIGH FIDEUTY.

INPUT		PUT								OUTPUT											
A. French dance, often used In Bach's suites	113	55	83	201	75	6	120		O. Of Anna Magdalena Bach, Wilcken	66	36	159									
B. Daughter of J.S. and Anna Magdalena Bach	144	121	207	48	82	189	102	20	P. English organist and com- poser of 32 operas (17651838), pupil of J.	51	7	165	70	208	104	135					
C. D' French com- poser (1851-1931)	31	195	73	164				55	C. Bach and Mozart Q. Ballroom dance of the												
D. Side of a violin	111	169	50						early 20th century (comp.)	106	76	154	64	181	88	10					
E. Handel oratorio (3 wds.)	174	127	183	5	157	79	61	90	R. To restate a theme as closely successive parts of	91	9	151	53	194	163	136					
				108	140	147	197	34	a contrapuntaj texture												
F. English music critic (1868–1959), translated Schweltzer's J. S. Bach	152	188	12	123	95	62			S. Woodwind used in Bran- denburg Concertos Nos. 1 and 2	71-	146	40	198								
G. Viola da	170	190	103	87	24				T. Bach's penultimate note here (Ger.)	125	58	180	148	119	27	101	204				
H. German lutenist/com- poser (1636-79): 100 sa-	114	176	203	42	155	187	145	13	in the second							17	67				
cred melodies for lute (full name)	1.11			89	105	56	129	25	U. German composer (c.	43	173	28	112								
I. Frost	14	93	150	131					1544–1617), helped de- velop Lutheran church music			20	112								
<ul> <li>J. One of a group of choral compositions by Handel; e.g., "O be joyful in the</li> </ul>	94	23	63	172	80	139	196	3	V. Stromenti da, Ital-	186	162	37	126	86							
Lord" (2 wds.)				160	109	44	122	16	W. In early violin sonatas, in-	- 00			107	150							
K. See Word N. (2 Ger. wds.)	179	115	206	60	29	78	134	19	dication of tremolo (it.)	26	41	2	167	153	138	97					
								99	X. F.D.R.'s Deal	202	49	132									
L in seinen Reichen, Bach's Ascension Ora- torio (2 Ger. wds.)	68	185	57	116	11	168	98	85	Y. Birthplace of J. S. Bach	133	205	191	184	46	171	22	81				
iono (z Gen. wos.)								161	Z. Decay	38	117	177									
M. Bach's ''Jesu, meine Freude''	209	77	142	33	192				ZZ. Bach's Cantata No. 38 (7 Ger. wds.)	45	182	200	39	149	8	92	124				
											72	156	21	100	52	175	143				
N. With Word K., Bach's Can- tata No. 103 (3 Ger. wds.)	54	166	30	158	6 <b>9</b>	199	18	84	_		130	15	193	1	59	107	32				
		96	128	141	74	4	110	47						118	137	65	178				

Solution to last month's HIFI-Crostic appears on page 6.

# Unidentical twins.





We couldn't leave well encugh alone. So when the A-170 was rated a "best buy" we made it even better. Now it's the A-170S.

It's easy to understand what makes it a best buy; if it were our only deck, the A-170S would cost much more. Instead, we were able to take advantage of the same technology and computerized equipment we use in making decks that cost three times as much as the A-170S. Which means the difference between our lowest priced deck and our heavy duty decks is features, and not tolerances. And speaking of heavy duty, the A-170S even has a built-in Dolby\* noise recuction system, to virtually eliminate annoying tare hiss.

So if you're looking for a best buy in a top-loading deck for less than \$200, \*\* your choice is simple; TEAC A-170S.

SPECIFICATIONS Wow & Flutter (NAB Weighted): 0.09% WRMS

Signal-to-noise ratio: Without Dolby 50 dB (WTD 3% THD) With Dolby@1 kHz S5 dB With Dolby over 5 kHz 60 dB

Frequency response: Cr02/FeCr tape 30-14,000 Hz Hi-energy tape 30-11,000 Hz

\*Dolby is a trademark of Dolby Laboratories, Inc. \*Nationally advertised value. Actual rescle prices wilbe determined individually and at the sole discretion of authorized TEAC dealers.

The A-100 is shown with an optional simulated wood cabinet.

# **A-100**

And for you front-loading fans, the TEAC "best buy" deck comes that way, too.

The A-100, also less than \$200,\*\* bocsts the same features and specs as the A-170S, the same precise transport system; same capstan driveshaft, ground to a tolerance of one micron ar less. You can still change from fast forward to rewind without hitting the STOP button. There's even a special timer function so you can plug in an external timer and record when you're away from home.

BOON

Sc whether you like your deck up like the A-170S, or up front like the A-100, we have a best buy for ycu; one of the unidentical twins from the TEAC fire family of tape decks.



The leader. Always has been.

TEAC Corporation of America 7733 Telegraph Road Mantebello California 90640 In Canada TEAC is distributed by White Electronic Development Corporation (1966) Ltd.

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OTEAC 1977

You've never heard anything like it. Not from us. Not from anyone. JBL's new L212- a totally new picture of high performance sound, from the people who wrote the book.

You hear the whole sound first. And when you catch your breath you search for words to describe the depth, the detail, the etched precision of the music.

That stunning pair of three-way speakers is sending clean, undistorted sound to every corner of the room. At every frequency. At every level. Loud or soft. High or low. It doesn't matter. The energy is constant.

You're experiencing threedimensional imaging. Vocal up front. Lead guitar two steps back and one to the left. Drums further back. The piano closer, almost off the right edge of the sound.

Suddenly you're aware of a fullness in the music that you've heard before but never associated with recorded sound.

The bass! You've been hearing all of the bass, all of the fundamental tones you couldn't bring home from the concert. It's not only everything you've heard before. It's everything you haven't. The music is rich with sound at the lowest limit of your hearing.



Then you see the third speaker The hero of the piece The Ultrabass.

The Ultrabass is a system in itself—woofer, amplifier, equalizer and enclosure—designed, mated, blended to do one thing perfectly: reproduce sound at the threshold of sub-sonic frequencies.

It brings all the low frequency music within audible range, balancing it perfectly with the rest of the music. Without boominess. Without resonance. It also electronically sums left and right signals below 70 Hz—virtually eliminating turntable rumble and record warp noise. And, because of the non-directional character of the low frequency sound, the Ultrabass can be placed almost anywhere in the room. Without any loss of three-dimensional imaging.

The Ultrabass pays one final dividend: it allows the two threeway speakers to be specialists, too. They can concentrate on the top 95% of the music. (Listen to the whole system, and you'll hear what that means. Even at a rugcurling, rock concert loudness, you'll get a clarity, a smoothness, an enthusiasm for detail you've never heard before.)

Finally, you look for the monster amplifier that's driving all that sound. There isn't one. The L212 takes one fourth the power you'd need with a conventional low efficiency loudspeaker.

That's the story. What you've been reading about is, essentially, a no-trade-off loudspeaker system. Now we'll tell you the trade-off: The price is \$1740. (The L212 may take a little while becoming a household word.)

In the meantime we have two suggestions:

If you'd like a lot more technical information, write us and we'll send you an engineering staff report on the L212. Nothing fancy except the specs.

Or call your JBL dealer and ask him when you can hear the L212. You've never heard anything like it. Not from us. Not from anyone.



Frequency Dispersion at 400 Hz at 2 kHz at 10 kHz

## JBL CHANGES THE PICTURE OF SOUND.

O

U.S.

## You can be part of the music.

Your workday is over. You've settled back into a realiner and a pair of Koss Technician<sup>TM</sup>/VFR Stereophones in anticipation of a perfect, we symphony broaccast. Now with TO2 finely tuned instruments and highly talented musiciane, the conductor is ready to escarthyou into the cozy world of symphonic brilliance. As the last slight ecaces of his baton taps

disappear into silence, the violin

sec ion fills your mind with a warm, glowing hum. The cellos, violas, and bass ease into the flow, adding a reverberating depth to the mood. And as the polished power of the oress begins to court the sensua woodwinds you find the true becuty of your Koss Technicians. Because the VFR controls at the base of each earcup enable you to fine tune the frequency response range to your idea of perfectiom. Allowing you to shape the acoustic contour of the symphony to enrich the rolling lows of the timpani and bassoons, or add a chilling dimension to the high pitched violins and flutes

So if you'd like to hear a performance that s at your command, visit your audio specialist and slip into the breathtaking Sound of Koss with Technician/VFR. Or, if you prefer, wr te us c/o Virginia \_amm for a free, full color catalog ¬f all our products. Either way, ~emember that with a pair of Koss Fechnicians, beauty is definitely at he fingertips of the beholder. Zass Technician/VFR Stereophones

© 1977 Koss Corp.



from the people who invented Stereophones.

#### A Most Improbable Noise Suppressor

One unit that we considered for inclusion in last month's article on antinoise equipment is made by Packburn Electronics (P.O. Box 335, Dewitt, N.Y. 13214). We decided against including it on two grounds: First, its price (\$1,977) and styling put it squarely in professional territory, and we were dealing with consumer equipment; second, it will do most for mono program sources and requires flat (not RIAA) high-frequency output from the phono preamp feeding it for best operation, both of which considerations limit its application in a home stereo system. But our interest remained, so we were delighted when Richard C. Burns—who with Thomas N. Packard constitutes the partnership, and the total employment roll, of the company—brought this unit plus appropriate ancillary equipment for a demonstration of its capabilities.

The Transient Noise Suppressor-like the SAE device in our article-is designed primarily to attack pops, clicks, and so on. Unlike the SAE, it has no delay line, no circuitry for sensing the trailing edge of the transient, no mechanism for "patching the holes" left when a transient is removed. Instead, it responds (very fast) to the leading edge of the extreme transients presented by record scratches and similar defects with an extremely brief suppression of output signal. There are two blankers, as Packburn calls them, each adjustable for sensitivity and speed: FAST or SLOW. Actually, even SLOW is so fast that we never perceived its action as a hole in the program, though Burns showed us how, with the sensitivity set for excessive action, the music takes on a sort of garbled, gritty quality to announce the poor setting. (Not surprisingly, the effect is similar to that of playing a disc with too low a VTF, which deprives the stylus of good groove-wall contact and does, in fact, "blank" the signal whenever contact is lost.) The two blankers can be used independently (for separate action in each channel of stereo programs) or can be cascaded, with different settings, for maximum effect on mono programs.

More interesting, in a way, is the "switcher" section of the Transient Noise Suppressor. Playing mono discs through stereo equipment derives identical signals from both groove walls (Packburn supplies a balancing circuit, should the ancillary equipment be inexact in this respect), while noise tends to be quite different in the two walls. Scratches, for example, tend to impress themselves more in one than the other, depending on the direction in which the disc was scratched; pressing defects too can affect one wall more than the other. The switcher section has circuitry that will determine the relative noise content in the two channels, instant by instant, and gate the quieter of the two to the output. All other devices we've worked with force one to deal with the combined noise in mono material or to stay with a single channel—and from watching the switcher's LEDs, we know how frequently it is called upon to change channels in typical recordings.

There is a switch that allows the user to choose the noisier of the channels. It has interesting potential in demonstrating the advantages of the switcher but also can be used in playing mono tapes (in which the noise tends to be equal in the two channels) to hopscotch between any dropouts; it will choose the channel with the least instantaneous loss of signal due to oxide flaking, physical damage, or similar defects. Having struggled long hours with damaged full-track and half-track tapes from the Fifties, we appreciate this capability.

We also were astonished at times by what the unit would do over-all. Deep scratches and cracks are not suppressed as thoroughly by the Packburn as they are by the SAE—a fact that Burns is quick to admit. But when confronted with a multitude of pops so closely spaced as to constitute almost continuous noise (the vulnerable point of the SAE), the Packburn produces astonishing improvement—the best (short of ruthless filtering, which of course damages the program) we have ever heard with this sort of noise. And we were unable to detect any instance, given reasonable setting of the controls, when it mistook program transients for noise. Though obviously less flexible and less comprehensive when applied to stereo programs, the action has value here too.

Obviously the Packburn device is by no means the ultimate noise reducer—nor is it claimed to be. It is rather a significant addition to the equipment arsenal available to specialists dealing with historical recordings, who presumably will use it in combination with other devices. As such it promises to improve still further the modern reissues of classic sound documents.



#### And . . .

Andrew S. Rappaport, president of A. S. Rappaport Company, Inc., of Armonk, New York, Is nineteen years old. Despite the youth of its chief executive, the company has been in business for a year manufacturing and marketing the Rappaport PRE-1 stereo preamplifier, a design that won the praises of *The Audio Critic*. Andy, whose interest in electronics dates back ten years, is a performer, composer, and avid music listener. Having recently perfected the PRE 1A, an improved version of the PRE-1, Andy is contemplating the design of a high-quality power amplifier as well as the expansion of his production facilities so that "everyone who wants one of my preamps can have one."

Physicist Orest Symko of the University of Utah teaches a liberal education course called "The Physics of Hi-Fi." Noting that most of high fidelity involves physics, Symko observes that "many students are afraid of physics, largely because of the mathematical analyses of the subject." He goes on to say that, when students realize how much of physics is founded on common experience requiring little mathematical understanding, they are encouraged to learn more science. Some of them have become interested in constructing their own equipment, and many take the class, according to Symko, so that they can talk to the audio salesman in his own jargon. Physics? Utah is fortunate indeed in its breed of salesman.

Available upon request from Lux Audio of America, Ltd., 200 Aerial Way, Syosset, New York, are reprinted copies of a report prepared by Stereo Sound, a leading Japanese publication, concerning extensive tests of 18 power amps and 18 preamps from 19 manufacturers. Represented by name in the report are products from Accuphase, C/M Laboratories, GAS, Harman-Kardon, JVC, Kenwood, Lux, Marantz, Mark Levinson, McIntosh, Onkyo, Pioneer, Quad, SAE, Sansui, Sanyo, Sony, Technics, and Yamaha. Other products whose performance proved substandard are listed as "Brand X."



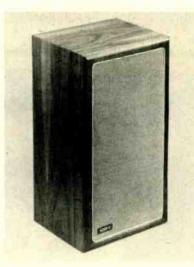


#### New receiver line from Marantz

One of the stereo receivers in Marantz' new line is the Model 2252, which incorporates a dual-gate MOS-FET front end for improved FM reception. Front-panel features include zone-detented tone controls and a Dolby FM de-emphasis switch. A phase-locked loop multiplex de-modulator is provided, as well as a jack for hooking up a four-channel FM decoder. Minimum power rating of the 2252 is 52 watts (17¼ dBW) per channel, 20 Hz to 20 kHz, with no more than 0.1% total harmonic distortion. The price is \$460. The two other models in the line, designated 2226 and 2238, cost \$310 and \$360, respectively.

#### Successor named to Advent Loudspeaker

The New Advent Loudspeaker, like its predecessor, is a two-way, acoustic-suspension system. Crossover occurs at a nominal 1.5 kHz. The 12inch woofer and 1%-inch tweeter of the original Advent have been redesigned for greater capacity to take advantage of the increased high-frequency energy implicit in recent disc and pickup improvements. A three-position switch on the rear panel for choosing high-frequency balances allows the speaker to be matched to source material and listening environment. The 8-ohm system is rated for a minimum power of 15 watts (11<sup>3</sup>/<sub>4</sub> dBW). The New Advent, which comes in a walnut-veneer cabinet, costs \$149. It is also available in a vinyl utility cabinet for \$129,



IT'S MAGIC. THE ACCUTRAC 4000. IT THINKS IT REMEMBERS. IT SEES IT PERFORMS. IT TAKES THE EXPERIENCE OF LISTENING TO MUSIC INTO ANOTHER DIMENSION ANOTHER CENTURY.

IT'S THE ONLY INSTRUMENT IN THE WORLD THAT LETS YOU HEAR THE SELECTIONS ON A RECORD IN THE ORDER YOU LIKE, AS OFTEN AS YOU LIKE, AND SKIP THE ONES YOU

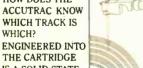




CONTROL IT SETS A NEW STANDARD OF TECHNICAL SOPHISTICATION THAT WILL SATISFY THE MOST DEMANDING PURIST. **COMPUTER CIRCUITRY** INSTEAD OF MECHANICAL **FUNCTIONS** WE REPLACED HUNDREDS OF MECHANICAL PARTS WITH ADVANCED COMPUTER CIRCUITRY. THE LATEST MOS IC CHIPS COMBINE THE FUNCTIONS OF THOUSANDS OF TRANSISTORS, DIODES AND OTHER COMPONENTS TO CONTROL AND **PROGRAM ALL AUTOMATIC** FUNCTIONS. AS EASY AS 5, 2, 6, 6. THE SLEEK CONTROL PANEL IS SOMETHING OUT OF THE 21ST **CENTURY** YET IT'S INCREDIBLY SIMPLE TO OPERATE. SAY YOU WANT TO HEAR THE FIFTH CUT FIRST, THEN THE SECOND CUT, THEN THE SIXTH CUT TWICE. JUST PUSH THE BUTTONS MARKED 5, 2, 6, AND 6 AGAIN. THEN SIT BACK AND LET

ACCUTRAC DO THE REST. IT ACCEPTS UP TO 24 **DIFFERENT COMMANDS** THE TONEARM

WITH EYES. HOW DOES THE ACCUTRAC KNOW WHICH TRACK IS WHICH?



THE CARTRIDGE IS A SOLID-STATE **INFRA-RED GENERATOR WHICH** FOCUSES A TINY BEAM OF LIGHT ONTO THE RECORD THE CLOSELY SPACED GROOVES OF EACH CUT SCATTER THE LIGHT. BUT THE SMOOTH SURFACES BETWEEN THE CUTS SEND THE LIGHT BACK TO THE INFRA-RED DETECTOR IN THE CARTRIDGE.

THE INFORMATION IS INSTANTANEOUSLY RELAYED TO THE BRAIN IN THE TURNTABLE. WHICH COUNTS THE TRACKS. AND YOUR WISH IS ITS COMMAND

#### YES, MASTER.

A SMALL, CORDLESS REMOTE TRANSMITTER WITH A DUPLICATE SET OF CONTROLS NESTLES IN THE PALM OF YOUR HAND AS YOU RELAX IN THE COMFORT OF YOUR EASY CHAIR. POINT IT TOWARDS THE SILVER SPHERE ACROSS THE ROOM AND THE BLINKING RED LIGHT ON THE REMOTE RECEIVER



WILL LET YOU KNOW IT HAS RECEIVED YOUR COMMANDS. THE ARM YOUR FINGERS **NEVER TOUCH.** BECAUSE OF ACCUTRAC'S UNIQUE PROGRAMMING CAPABILITY, YOU NEVER HAVE TO TOUCH THE TONEARM. AND THE CONTROLS ARE OUTSIDE THE DUSTCOVER, SO YOU NEVER RISK ACCIDENTALLY DAMAGING A RECORD THE TONEARM HAS ITS OWN SERVO-MOTOR WHICH IS DECOUPLED THE INSTANT THE STYLUS TOUCHES THE RECORD, SO HORIZONTAL AND VERTICAL FRICTION ARE VIRTUALLY ELIMINATED. "WOW", INDEED. THE ONLY "WOW" YOU'LL HEAR IS FROM YOUR FRIENDS. ACCUTRAC'S WOW AND FLUTTER ARE A COMPLETELY INAUDIBLE 0.03% WRMS. RUMBLE IS -70dB (DIN B). THE TRACKING FORCE IS A MERE ¾ GRAM. TONEARM RESONANCE IS **ONLY 8-10HZ** AND A DIRECT DRIVE MOTOR TURNS THE RECORD AT THE EXACT SPEED. WHILE ELECTRONIC SPEED MONITORING SENSORS KEEP IT THERE. MAGIC & SCIENCE. THE INTEGRATION OF COMPUTER CIRCUITRY, **INFRA-RED OPTICS AND** AUDIO TECHNICAL

**EXCELLENCE LETS** YOU HEAR THE TRACKS YOU LIKE, IN THE ORDER YOU LIKE, AS OFTEN AS YOU LIKE, AND EVEN SKIP THE ONES YOU DON'T LIKE THAT'S THE GENIUS OF ACCUTRAC.

ADC PROFESSIONAL PRODUCTS A DIVISION OF BSR CONSUMER PRODUCTS GROUP ROUTE 303, BLAUVELT. NEW YORK 10913 A BSR COMPANY ® ACCUTRAC IS A REGISTERED TRADEMARK OF AUDIO DYNAMICS CORP.





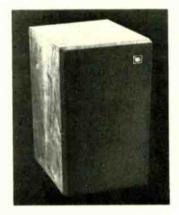
#### Stax adopts carbon-fiber tone arm

Because of its favorable strength-to-weight ratio, carbon-fiber construction (among golf clubs, bicycle frames, and the like) is something of a glamor product representing state-of-the-art engineering. The first to employ the material in a separate tone arm appears to be Stax—whose products are sold here by American Audioport—which also claims exceptionally low resonance for its design. The Stax CF, with detachable headshell, cueing, and antiskating, sells for \$256; the carbon-fiber tube is available separately for owners of the earlier version who wish to upgrade.

CIRCLE 136 ON READER-SERVICE CARD

#### JBL adds 4301 Monitor loudspeaker system

The JBL 4301 monitor speaker is designed specifically for small recording studio and broadcasting applications. It is a two-way system, using an 8-inch low-frequency speaker and a 1.4-inch direct driver for frequencies above 2.5 kHz. The system has a nominal impedance of 8 ohms, with a rated power handling capacity of 15 watts (11¾ dBW) continuous. The 4301, whose cabinet is finished in a black walnut veneer, can be placed either horizontally or vertically and sells for \$168. CIRCLE 144 ON READER-SERVICE CARD





#### New Dual turntable line

The three two-speed (45 and 33 rpm) models in United Audio's turntable line are adaptable for single- or multiple-play use. At the top of the line is the Dual 1245, featuring an illuminated strobe and straight-line tubular tone arm. Driven by an 8-pole synchronous motor, the 1245 offers a 6% pitch control range and viscous-damped cueing. Separate antiskating dials are provided for conical, elliptical, and CD-4 styli. Also included are a switch for continuous repeat in the single-play mode and a six-disc changer spindle for the multiplay mode. The price of the 1245, with base and dust cover, is under \$230. The two other models, the 1237 and 1241, also come with tone arm and range in price from less than \$135 to \$200.

CIRCLE 17 ON READER-SERVICE CARD

#### H. H. Scott PRO series enlarged

The Scott PRO-70 air-suspension speaker system has three-way balance controls hidden behind a panel at the front of the base. Scott says the PRO-70 has a power-handling capacity of up to 100 watts (20 dBW) and suggests use with amps rated at up to 150 watts (21¾ dBW) per channel. The three-way system uses a 12-inch woofer.  $4\frac{1}{2}$ -inch midrange, and two 1-inch dome tweeters. Frequency response is rated at 35 Hz to 20 kHz  $\pm$ 4 dB; crossovers are at 800 Hz and 4 kHz. The price of the PRO-70, which comes in a walnut-veneer cabinet, is \$299.95. CIRCLE 141 ON READER-SERVICE CARD





#### A mixer from Sunn Musical Equipment

The Sunn Magna 1160 Mixer is a 6-in/1-out mixer, featuring separate treble and bass controls for each channel. Three-pin connectors are provided for low-impedance microphone lines and ¼-inch phone jacks for high-impedance inputs. There also is a ¼-inch phone jack for preamp output in each channel. Additional jacks provide for patching in an external reverberation chamber or other device. The suggested list price for the Sunn Magna 1160 is \$325.

CIRCLE 142 ON READER-SERVICE CARD

# The Precision Decision. We made it. Now it's your turn.

We believe that precision is the most important factor in turntable design and performance. Which is why we've built such a high degree of precision into our advanced new lina of turntables

JVC

degree of precision into our advanced new line of turntables. Sc you'll need a whole new set of reasons to choose the one that's right for you. And when it comes to value, all seven will play second to none.

Take our new QL-7 Quartz-Locked and JL-F50 Fully Automatic direct drive, shown above. They're both unusually close when it comes to some important specs, but what will surprise you most is that they're also both in the same price range.

For instance, the JL-F50 checks in with 0.03% wow and flutter (WRMS); 70dB signal-tonoise ratio (DIN B). And it offers a host of convenience features as well, with most controls up front so you can operate them without lifting the dust cover. Its fully automatic operation gentles your favorite records, and lets you repeat them from one to six times, or infinitely. A built-in strobe makes speed adjustments easy and accurate. And the JL-F50's looks are in keeping with its precision design. The QL-7's looks are equally great. And in its electronic heart, it's *e* tiger. All business, with the incredible accuracy only a Quartz-Locked machine can boast. Truly for a perfectionist, the CL-7's wow and flutter measures on y 0.025% (WRMS); S/N is more than 74dB (DIN B). Figures that no other QL turntable we've seen in ts category can touch. It's totally manual, with strobe speed indicator, and priced less than any other QL machine on the market.

The way we see it, you're left with a superb decision: our JL-F50 at less than \$250\*, with all the convenience and performance most people could ever want, or our QL-7, the finest under \$300\* turntable available today for the discriminating audiophile.

Either JVC you choose, you'll

have made the right decision. JVC America Company, Division of US JVC Corp., 58-75 Queer's Mictown Expressway, Maspeth. N.Y. 11378 (212) 476-8300. Canada: JVC Electronics of Canada, Ltd., Scarborough, Ont.

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



JL-F50

# Sansui has just raised the standards for budget-class high fidelity: the new G-3000 stereo receiver.

Strikingly attractive new styling. Advanced eng neering. State-of-the-art technology. Beautitully pleasing musical performance. The new Sansui G-3000 has it all. (And at less than \$280.) Because Sansui knows how important your high fide ity comparent music system can be in your life.

The new G-3C00 brings a unique new look to receivers. You will be proud to have it in your home. The pright brushed aluminum tace is highlighted by a rich gold dial. And the G-3020 is the first receiver available today that is totally symmetrical, with the tuning knob and volume control positioned accordingly.

A pleasure to look at, the G-3000 is also a preasure to use. It offers an ultra wide frequency-linear dial; separate signal-strength and center-tune meters; an extra-sensitive, large flywheel-assisted tuning knob; stepped-attenuator volume control; two-system speaker selector; and mic-mixing input.

Above a l, you'll love to listen to the amazingly clean sound of the G-3000. With total harmonic distortion of less than 0.15% over the entire audible range, you get musical quality and performance usually available only in much in grier ariced models.

Signai-to-noise ratio is extraordinarily ngn, stereo separation extraordinarily wide, and Distortion extraordinarily low for any receiver in this power class. \*\*

Ge to your nearest franchised Sansui dealer. Touch the controls of a G-3000 and listen to its succerc light quality. You'll know why it represents a temendous advance in high fidelity cevelopmental engineering.

# Sansui. A whole new world of musical pleasure.

Also available is the G-2000 at under \$230."

\*Approximate nationally advertised value. The actual retail price will be set by the individual dealer at his option.

"25 watts per channel, min. RMS, both channels driven into 8 omms from 20-20,000 Hz with no more than 0.15% total harmonic distortion.

G-2000:to watts per channel with no more than 0.2% total harmonic distortion under the same conditions.



#### SANSUI ELECTRONICS CORP.

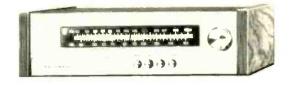
Woodside, New York 11377 • Gardena, California 90247 SANSU: ELECTRIC CO., LTD., Tokyo, Japan SANSU: AUDIO EUROPE S.A., Antwerp, Belgium • In Canada: Electronic Distributors

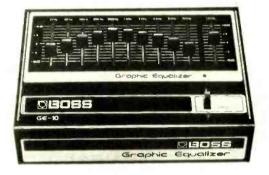


#### **Budget kits from Heath**

Heath's latest kit offering is the AJ-1219 stereo FM/AM tuner. The preassembled FM front end is rated for 2-microvolt (11¼-dBf) sensitivity. Features include a phase-locked loop multiplex circuit, pushbutton band selection, and flywheel tuning. Inputs are provided for a 75- or 300-ohm FM antenna; an AM rod antenna is built in. Selectivity of the tuner is rated at 60 dB, and capture ratio is 2 dB. The AJ-1219 kit costs \$109.95, as does the matching AA-1219 amplifier kit.

CIRCLE 140 ON READER-SERVICE CARD





#### **GE-10 graphic equalizer**

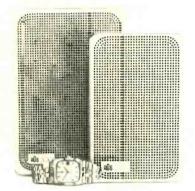
Beckmen Musical Instruments' new GE 10 is a ten-octave-band graphic equalizer, with 12 dB cut or boost available at each band via a slide fader. An eleventh fader varies the over-all level—also over a  $\pm$  12 dB range. Unity gain settings are insured by a click stop at the middle of each fader's slide path, and EQUALIZER/NORMAL allows switching the system in and out of the circuit. The GE-10 can be switched to accommodate microphone or line-level input signals, and an accessory jack permits remote control of the equalizer in/out function. The cost of the GE-10 is \$149.50.

#### CIRCLE 146 ON READER-SERVICE CARD

### ADS 300 Mini Monitor introduced

The ADS Model 300 speaker is slightly larger than its progenitor, the Model 200, but still is designed for use where space is limited. ADS claims that the increased dimensions of the acoustic-suspension system enable it to reproduce bass notes down to 50 Hz. A 1-inch softdome tweeter and 5<sup>1</sup>/<sub>4</sub>-inch woofer are employed in the 300, whose maximum power level is rated at 50 watts (17 dBW). Frequency response of the 4-ohm speaker is rated at 68 Hz to 20 kHz  $\pm$  3 dB; crossover occurs at 2.5 kHz. The 300 comes in a solid aluminum cabinet, available in either satin black or silver finish, and costs \$140.

CIRCLE 138 ON READER-SERVICE CARD





#### AKG Acoustic's supercardioid microphone

The D-2000E supercardioid microphone is an addition to AKG's Performer line—a series of dynamic moving-coil microphones designed for stage and nightclub applications. The company recommends the microphone for hand-held use and points out that it features superior feedback rejection and adjustable bass response. The mike is internally shock-mounted and contains a built-in windscreen. The price of the D-2000E is \$110.

CIRCLE 145 ON READER SERVICE CARD

### Roadstar cassette deck from Royal Sound

The RS-5800 Dolby cassette deck is a front-loading model with IC transport logic, permitting safe function switching without going through stop. Among the two-motor unit's many features are auto shutoff, memory stop, peak LEDs, peak limiter, and timer operation. Separate bias and equalization switches are provided, as well as an auto/repeat switch for continuous play of one tape side. Separate mike and line controls allow input mixing, and Dolby-encoded FM broadcasts can be recorded and monitored via a Dolby-FM switch. Frequency response is rated at 38 Hz to 13 kHz  $\pm 2$  dB with standard tape, and signal-to-noise ratio at 58 dB. The price of the RS-5800 is \$400.

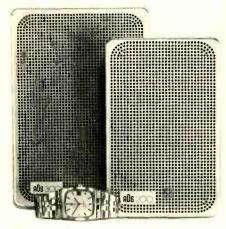
CIRCLE 143 ON READER-SERVICE CARD



### INVISIBLE SOUND INVISIBLE

"... as a result of the pioneering work by ADS' scientists, these mighty miniatures can be used with almost any sound source, including the smallest amplifiers on the market.

However, their real purpose is to bring genuine high fidelity sound to places where a large box isn't practical or necessary — and they suit this purpose admirably."



### THE INVISIBLE ADS 2000 and ADS 300.

ADS manufactures a complete line of loudspeaker systems, active and passive, for home, mobile and studio applications, priced between \$100 and \$700 (approximately). For catalogs and a dealer list send this coupon to:

ADS, ANALOG & DIGITAL SYSTEMS, 64 INDUSTRIAL WAY, WILMINGTON, MASSACHUSETTS 01887

300C-771V		HF8
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Recently I constructed a pair of speaker cabinets, following Electro-Voice specs, to house E-V T-350, 1823M with the 8HD, and SP-12C drivers at a substantial saving. Various friends have heard them and expressed interest in building their own as well. But before building, they consulted a so-called audio expert who told them that my horns and cabinets are no good. After hearing this I confronted him with many questions. He said that, because I have a bass-reflex system coupled with horns and homemade cabinets, I cannot have accurate sound reproduction. He stated that I have front-rear wave interference because of the tuned port and that because of the nature of the diffraction horn I would also experience frontal wave distortion from my midrange and tweeter.

What would you recommend? Bass-reflex or acoustic suspension? Horn loading or a cone tweeter and midrange?—Chris Lajcin, Portage, Ind.

If you like the sound you hear, ignore the "expert." He is discussing some highly rarefied effects found in some well-respected speaker systems. It would be entirely possible for you to satisfy his objections with a speaker design that, nonetheless, you would consider inferior to the one you have.

I have what could be called a state-of-the-art setup and would like to upgrade my preamp. My system is quadriphonic, with two Tannoy GRFs and the Braun 4-ohm, three-way speakers in the rear. My amplifier is the new Threshold 800A. The rear speakers are driven by a Sherwood S-9940 amp/preamp. I have the Sony SOD-2020 decoder: my turntable is the Thorens 125 Mk. II with the Infinity Black Widow arm and the AKG P-8ES cartridge. I own a Yamaha CT-7000 tuner. My tape decks are the Sony TC-850-4 and a Tandberg 6000X. I have two Advent 100A Dolby units. My present preamp/control center is the McIntosh C-28, which I've had for about seven years. I can spend as much as \$2,000 for a top-line preamp. Can you suggest a state-of-the-art model, or do you advise that I stick with the McIntosh?-S. Schecter, Montreal, Canada

Your system is one of which many audiophiles would be envious. To give the advice you request would do you a disservice, especially since you have not told us *why* you want to replace the McIntosh C-28. If the control functions of the "Mac" are satisfactory and it interfaces well with your power amp, we see no necessity for replacement. Upgrading a system that already is in the stratosphere is a difficult matter, requiring much attention to specific details. Incidentally, if it is the phono stage of your present equipment that no longer satisfies you, it is possible to replace that section with an independent unit that would feed an Aux input. This would have advantages in terms of flexibility.

I spend a great deal of time copying discs onto cassette tape. I have been offered the use of a Tandberg TCD-310 for this purpose, but this deck will not be used for playback. My intention is to assemble a tape library first and then buy my own deck. Will tapes made with the Tandberg sound different (i.e., "worse") if played on a deck in the \$250 to \$300 range, or are the differences negligible?—Jonathan Silverstein, Albany, N.Y.

We would expect the record/playback response of the Tandberg TCD-310 to exceed that of a deck in the price range you suggest. so it is unlikely that a tape recorded on the Tandberg and played back on such a machine will sound quite as good as it will on the Tandberg. It is entirely possible for your Tandberg-recorded tapes to sound better on a cheaper machine than tapes recorded on that machine. It would be a good idea, however, to take along one or two of your "hotter" recorded tapes for use in auditioning any deck you intend to buy. This will insure that the playback electronics of the new deck can accommodate the levels in your recordings.

In the article "How Loud Are Your Speakers?" [June 1976] you gave an example in which the desired sound pressure level from the speakers was 92 dB and it was assumed that the speakers produced 84 dB from a 0-dBW input. My listening levels are, I suspect, more like 70 to 85 dB, and tacking on an extra 2 dB for safety would mean that 87 dB would do for me. However, when I subtract 92 dB from 87 dB to figure out how much power this would require, I get a negative number (-5 dBW) that I am at a loss to interpret.—Kevin McHale, Mars, Pa.

Negative numbers in dB (or any form thereof, including dBW) are no mystery; they simply mean so many dB below the assumed 0-dB reference. Since 0 dBW is defined as the equivalent of 1 watt, -5 dBW is 5 dB lower, or about 0.3 watt. (Note that the power in watts is positive.)

But there is an error in your approach. If the speaker will deliver a sound pressure level of 84 dB from a 0-dBW (1-watt) input, you would subtract this figure—not the 92 dB

### WHY MOST CRITICS USE MAXELL TAPE TO EVALUATE TAPE RECORDERS.

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

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

A tape that can't cover the full audio spectrum can keep a recorder from ever reaching its full patential.

A tape that's noisy makes it hard to measure how quiet the recorder is.

A tape that doesn't have a wide enough bias latitude can make you question the bias settings. And a tape that doesn't sound consistently the same, from end to end, from tape to tape can make you question the stability of the electronics.

If a cassette or 8-track jams, it can suggest some nasty, but erroneous comments about the drive mechanism.

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

Fortunately, we test Maxell cassette, 8-track and reel-to-reel tape to make sure it doesn't have the



problems that plague other tapes.

Sc it's not surprising that most critics end up with our tape in their tape recorders.

t's one way to guarantee the equipment will get a fair hearing.

MAXELL. THE TAPE THAT'S TOO GOOD FOR MOST EQUIPMENT. Maxell Corporation of America, 130 West Commercic LAve., Moonachie, N.J. 07074





## and FM DIRECTORY

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



If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the *Reader Service Card* to the magazine. CIRCLE 22 ON READER-SERVICE CARD of the cited example—from 87 dB (your desired SPL). Therefore you would need 3 dB more power than the reference signal, or +3 dBW (2 watts). Allowing another 10 dB for peaks. you might look at receivers offering 13 dBW (20 watts) per channel. Even had your first subtraction come out as a negative number the calculations would have been the same. Say you wanted only 81 dB SPL. That's 3 dB below the reference 84 dB SPL, so you would need only –3 dBW (0.5 watt) for 81 dB SPL. Allowing 10 dB for peaks would give you +7 dBW or 5 watts per channel as desirable.

I am using a Quad 33 preamp and 303 amp to drive my Electro-Voice Interface A speakers, incorporating the Interface equalizer in the tape monitor circuit on the preamp. I am acquiring a BSR FEW-3 graphic equalizer. I have been warned against overdriving the power amp (0.5 volt for full output) if I use the BSR between it and the preamp since 12 dB gain on 0.5 volt means 8 volts input signal. The ideal place for the BSR would be the tape monitor circuit already occupied by my Interface equalizer. To prevent a similar condition of overdriving, the Interface should, I think, be connected (electrically) ahead of the BSR with the tape monitor jacks of either one used for the connection.

Since I don't know whether equalization in the Interface A takes place before or after the signal passes to the BSR, could I be subjecting the Interface A equalizer to an equalized signal and consequent overload or damage?— David A. Yaw, St. Augustine, Trinidad.

It is highly unlikely that you could damage the Interface A equalizer with an input from a signal source, but the same does not hold true of the woofers used in the system. For these to operate safely and properly the lowend rolloff in the associated equalizer must be preserved. Therefore, whatever hookup you use, you should not apply any boost in the area of 40 Hz or below. Your problem with input levels is more imaginary than real, since you probably are not feeding anything close to 0.5 volt into the power amp. Incidentally, 12 dB gain from 0.5 volt produces 2, not 8 volts. Also since the boosts made via the BSR are only in specific frequency ranges, it is not correct to assume that you will boost the entire output by 12 dB, which is an extreme amount to begin with. Everything should be just fine if the Interface equalizer is connected to the preamp tape monitor loop and the BSR is connected to the tape monitor loop of the Interface equalizer.

I have a pair of Wharfedale W-90D speakers, which I believe are no longer manufactured. Has the state of the art banished acoustically inert, sand-filled enclosures to oblivion? Would the quality and sound-reproduction capabilities of the W-90Ds be competitive with JBL 166s, Pioneer HPM-200s, or other similar speakers that are manufactured today?— George D. Mealey, Norwood, Mass.

It would appear that particleboard, a reasonably cheap and easily worked material that is very dense and nonresonant, has displaced sand-filled (and just about all other) plywood in loudspeaker manufacture. Since you still own the Wharfedales, you are in a better position than we are to compare them with other models.

### "Marantz let me build the speakers I've always wanted to build."

**Ed May**, Vice President Speaker Engineering for Marantz

Over the past twenty years Ed May has firmly established himself as one of the industry's top experts on speaker systems Formerly the manager of speaker engineering for JEL, Mr. May has personally been responsible for many of the advances in speaker technology. As the new director of Marantz Speaker Development we asked him to comment on the new Marantz Speaker line.

> "Since joining Marantz I've never been turned down on anything I've wanted to do to improve quality. When it comes to quality, cost is no object."

"Our new Marantz speaker line is one of the top lines in the industry. The reproduction capability of our speakers can equal or out perform speakers that cost two to three times the price."

<sup>46</sup>We don't follow fads. We stay away from frivolous things that only increase the price tag without increasing performance.<sup>99</sup>

<sup>44</sup>Our toughest critics are ourselves. Many of the things we measure and test for are seldom encountered in the field.<sup>99</sup>

<sup>46</sup> My philosophy is to build the speaker so it reproduces all frequencies as smooth, as flat as possible in all angles of radiation. No matter where you sit you hear exactly the same sound.<sup>99</sup>

"I'm very proud of our new Marantz speaker line. It's what I've always wanted to build. My hat is off to Marantz for letting me do it."



# It's the real thing ±1dB.

"Phono-cartridge performance has come a long way in recent years, as can be judged from the 2000Z's measured frequency response. Including the effect of arm resonance in a typical tone arm. and combining the measurements from a couple of records, the response could homestly be described as  $\pm 1$ dB from 15 to 20,000 Hz. This is comparable to the flatness of most amplifiers, especially if the tone controls cannot be bypassed?

### Stereo Review

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

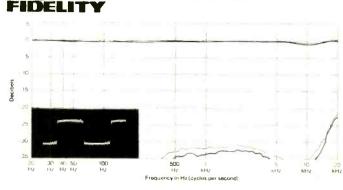
"The Empire 2000Z is truly impressive. It is well worth auditioning, even though that can't be done in a hurry if you are to hear – and savor – its quality."

HIGH

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

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

audjo trade news



Radio-

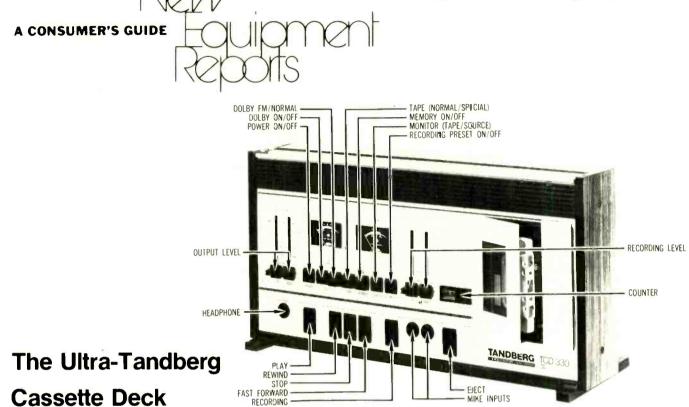
Electronics

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

For more information on the Empire 20002, and our free brochure "How to Get the Most Out of Your Records," write: Empire Scientific Corp., Department = 1 dB, 1055 Stewart Avenue, Garden City, N.Y. 11530, CIRCLE 9 ON READER-SERVICE CARD



Preparation supervised by Robert Long, Harold A. Rodgers, and Edward J. Foster Laboratory data (unless otherwise noted) supplied by CBS Technology Center



The Equipment: Tandberg TCD-330 Dolby stereo cassette deck in metal case with wood ends. Dimensions: 4 by 9 inches (top panel), 18½ inches deep; may also be used vertically. Price: \$1,000. Warranty: "limited," two years parts and labor. Manufacturer: Tandberg, Norway; U.S. distributor: Tandberg of America, Inc., Labriola Ct., Armonk, N.Y. 10504.

**Comment:** While it may seem at first glance that the Tandberg TCD-330 is a radical departure in cassette-deck engineering, its design in fact bears an orderly and developmental relation to that of its predecessors, the TCD-300 and 310. (We reported on the latter, in considerable detail, in August 1974.) Like them, the 330 has its cassette well oriented "north to south" and, with the included "feet," can be used either vertically or horizontally, as a frontloader or as a top-loader. The three-motor transport has been retained, now with an interesting wrinkle: Any slack in the tape is sensed and taken up automatically as soon as the well is snapped shut. All of the transport controls are solenoid-operated except for the backup mechanical EJECT lever on the underside that allows removal of a cassette from the machine with the power off.

But what most sets the TCD-330 apart from its immediate ancestors are its separate recording and playback heads. This configuration allows heads to be optimized for their respective functions and provides the operating convenience of off-the-tape monitoring while recording is in progress. To compensate for any tape skewing between the two heads, Tandberg includes an azimuth adjustment on the record head. The adjuster knob, together with a switch that feeds a 10-kHz tone to the record head, is concealed beneath a flipup panel near the cassette well. With the deck set up for recording and monitoring from the tape, the test tone is turned on and the azimuth adjusted for maximum deflection of the right-hand meter. The procedure should be repeated when the cassette is turned over—as it should with any deck of this type.

Conspicuously absent among the transport controls are a PAUSE lever and a conventional safety interlock of the RECORD function. Tandberg claims that the rapid, accurate action of the solenoids in engaging RECORD is such as to render a PAUSE redundant; we verified this to our satisfaction by excising several phrases from a jazz selection, leaving virtually no audible "seams." To offer some measure of protection against inadvertent recording, that function must be armed via a PRESET button before the RECORD will operate. With PRESET engaged, the meters will sample the input signal (so levels can be set) with the tape stationary. Generally, and despite their unusual nature, the controls are easy to assimilate and use. Contributing to that ease is the LED pilot on each pushbutton (EJECT is the sole exception), reminding the operator of its setting.

The metering system is Tandberg's now familiar design: peak-reading and measuring the signals after recording

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by GBS technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation siteading research organizations. The choice of equipment to be tested rests with the aditors of HiGk FibELITY. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof. may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested. neither HiGK FIDELITY for CBS Technology Center assumes responsibility for product performance or quality.

equalization—a type on which it would be hard to improve for ease in setting peak recording levels with accuracy. (The compression of the scale below –10 VU makes it hard to use such a meter for anything but setting peak levels; given the limited dynamic range of the cassette medium, Tandberg obviously has concentrated on its top priority: making maximum use of the inherently skimpy headroom.)

Put to the test by the CBS Technology Center, the TCD-330 acquitted itself handsomely, turning up excellent numbers in the process. The dual-capstan drive moves the tape just a hair fast but with excellent peak flutter measurements. Total harmonic distortion (almost all of it third harmonic) is very low, while IM distortion is in a region typical of cassette decks. Record/playback frequency response is smooth and extends from 20 Hz to 20 kHz with either Maxell UDXL-1 or UDXL-2—used, respectively, with the NORMAL and SPECIAL settings of the tape switch. As such extended response might suggest, the 19-kHz multiplex filter is switchable. The playback-only response also is very flat; the low-end rise is, of course, there by design.

The multiplex filter is on the back panel (bottom, with the deck used vertically)—making it distinctly less convenient to switch in (for recording from FM) or out (for anything but FM) than a front-panel switch. Also on the back panel are the line connections, a DIN socket (Tandberg calls it RADIO), and a multipin connector for an optional remote control, which we did not test. The manual, though judged a distinct improvement over that for the TCD-310, omits altogether one function of the 330: listening to Dolby-FM broadcasts without recording them. This

#### Tandberg TCD-330 Additional Data

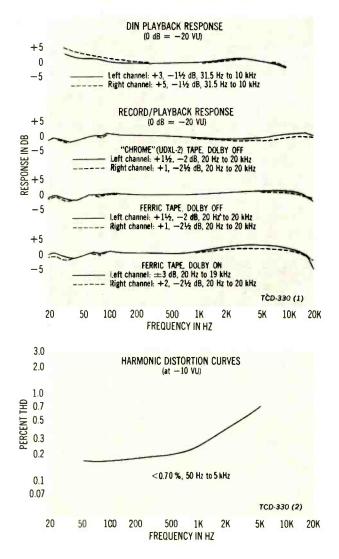
Speed accuracy	0 <mark>.26%</mark> fast at 105, 120, & 127 VAC		
Wow and flutter	playback: 0.04% record/play: 0.07%		
Rewind time (C-6	0 cassette)	47 sec.	
Fast-forward time	e (same cassette)	49 sec.	
S/N ratio (re 0 V playback record/play	U, Dolby off; CBS we L ch: 50 dB L ch: 47 dB	R ch: 51 ½ dB	
S/N ratio (re 0 V playback record/play	U, Dolby off; unweigt L ch: 50 dB L ch: 48 dB	R ch: 51 ½ dB	
Erasure <mark>(333</mark> Hz a	t n <mark>ormal level)</mark>	61 dB	
Crosstalk (at 333 record left, play record right, pla	right	41 ½ dB 42 dB	
Sensitivity (re Dl line input mike input	N 0 VU) L ch: 60 mV L ch: 0.14 mV	R ch: 64 mV R ch: 0.14 mV	
Meter action (re	DIN 0 VU) Lich: 1 dB low	R ch: exact	
Total harmonic d	istortion (at-10 VU) <0.70 <mark>%, 50</mark> Hz	to 3 kHz	
IM distortion (rec	ord/play, -10 VU) L ch: 5.0%	R ch: 5.0%	
Maximum output		R ch: 1.45 V	

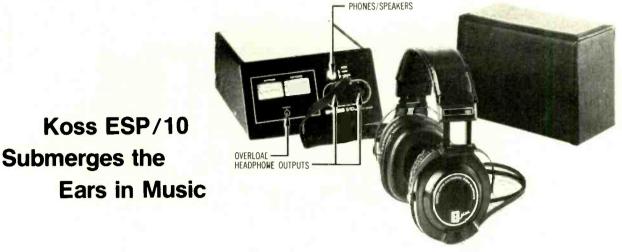
is done by monitoring SOURCE with everything set for Dolby-FM recording—whether or not you actually record the broadcast.

In our test, we found the Tandberg efficient and convenient to operate. The headphone output will drive a reasonably efficient set of phones to a level sufficient for monitoring, and the slide potentiometers that control recording and playback levels work smoothly enough and track well enough to permit one-finger fades. We were able to copy disc recordings and produce dubs that one is hard put to distinguish from the original. (The only difference that seems to have audible significance is a slight dulling of the highs in loud passages, where tape saturation begins to play a role.) And in our (less than exhaustive) test of live recording capability the deck also performed very well.

Over-all, the impression made by the TCD-330 is one of great sophistication. The individual features of the deck add up to more than the expected sum. While the package includes the convenience of memory rewind, and the double Dolby circuit (normally active in record and play simultaneously) can be switched to decode FM broadcasts, the price of the new unit (more than double that of its fore-runner) demonstrates that sophistication does not come cheap. But Tandberg decks have always displayed—not to say flaunted—their fresh, unusual approaches to the problems at hand, and we suspect that those who are attuned to the message will find price a secondary factor.

CIRCLE 132 ON READER-SERVICE CARD





The Equipment: Koss ESP/10 electrostatic headphones with E/10 energizer. Dimensions: E/10, 7¾ by 4 inches (front panel), 9 inches deep. Price: \$300. Warranty: "limited," one year parts and labor. Manufacturer: Koss Corp.,

4129 N. Port Washington Ave., Milwaukee, Wis. 53212.

**Comment:** To design and market headphones is to demonstrate great faith in the commonality of human hearing. With the normal "signal processing" of the outer ear by-passed—as it is by headphones—the more objective measurements available to the loudspeaker engineer are either meaningless or impossible to make without resorting to an artificial ear. And there is little agreement as to what constitutes an accurate artificial ear. We were interested to learn that at Koss a prototype headphone is adjusted until a team of experienced listeners (including John Koss, the founder and chairman of the board) says that it sounds right; then its parameters are measured and duplicated in production units.

The ESP/10 is electrostatic and, like other phones of that type, requires a polarizing voltage and step-up of the audio voltage. These are provided by means of an energizer box (equipped with semi-peak reading meters that read from -20 to +3 VU for both channels) that can accommodate two headsets. In addition, the box contains protective circuitry that disconnects the phones if drive levels become excessive. (We deliberately put this circuitry through its paces-without wearing the phones-and found its behavior unexceptionable.) Since the energizer connects directly to the speaker terminals of the power amp, a duplicate set of speaker outputs is provided on the energizer back panel along with the input terminals. (These are all spring-loaded and accept bared leads.) There also is a screw-type chassis ground terminal that is meant to be tied to the chassis of the power amp if hum

should intrude. The power supply for the energizer is line-voltage operated.

Putting on a new headset always gives us a moment of trepidation. There is a feeling that our ears are being consigned to captivity and to the perhaps not-so-tender mercies of the transducers. But the Koss phones, which are vented at the back, reassured us at once. The smooth, clear sound (with very low distortion) was comfortable even at high listening levels (full-scale deflection of meters indicates a sound pressure level of 107 to 110 dB) and gave our ears the secure conviction that nothing bad could happen.

And what we heard was really very good. The ESP/10 has a surprising ability to elucidate seemingly tiny musical details and tame minor faults of the program material at the same time. It produces a very convincing illusion of transparency without making the music larger or smaller than life. Typical of headphones, the stereo image the ESP/10 creates is not outstanding in accuracy, but the sound is so delightful that the mind's ear is soon seduced into accepting whatever pseudolocations voices and instruments may assume.

The spectral balance might not please everyone with every type of music, but tone-control corrections are accepted with unusually good grace and no sign of overload. Comfort is adequate (weight is a fairly hefty 15.9 ounces), and the connecting cable (coiled and extensible to about 8 feet) leaves the listener reasonable mobility.

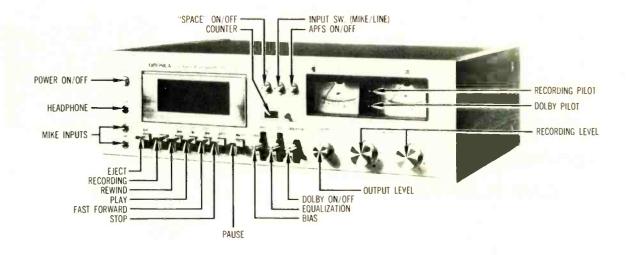
Listening to the ESP/10 is enjoyable indeed and would, we suspect, send a dedicated headphone freak into ecstasy. For us, it was like dipping our ears into nice, warm music. If you are partial to phones and can afford the rather stiff price, auditioning these might just make your day.

CIRCLE 131 ON READER-SERVICE CARD

### At Last: A Random-Access Cassette Deck-by Optonica

The Equipment: Optonica RT-2050U Dolby stereo cassette deck in metal case with wood-grained vinyl end panels. Dimensions: 18% by 5% inches (front panel); 14 inches deep plus clearance for controls and connections. Price: \$299.95. Warranty: "limited," two years parts and labor. Manufacturer: Sharp, Japan; U.S. distributor: Sharp Electronics Corp., 10 Keystone Place, Paramus, N.J. 07652.

**Comment:** Jaundiced readers (and we must admit we have some) should not assume from the headline or our emphasis here on a single and relatively cosmetic feature of the RT-2050U that it has nothing else to recommend it. On the contrary, it is a good deck, as we will document in due course. But its only unique feature—one, moreover, that will be major news to many cassette users—is APFS: Auto



Program Find System, a proprietary development of Optonica's.

Tape counters are well and good, but (even with "memory" features) they have two shortcomings for normal playback use. First, they don't help you find individual selections unless you go through elaborate indexing routines; second, such indexing of a cassette on one machine will not necessarily help you find selections on another because counters are not standardized. APFS requires no advance indexing, and therefore it does not depend on counter readings of its own—let alone those made on other decks. In essence, it senses the no-signal segments between selections and cues itself up to the beginning of the music.

Potentially this ability could be used for an elaborate search-and-play system, comparable to that of ADC's Accutrac in disc equipment, in which any selections could be played in any order from a given tape. Optonica has shown a prototype of such a unit, but the present model is much more modest in concept as well as price. With the APFS switch on, it will rewind or fast wind until the sensor detects a "space" and then stop. You may want to press PLAY at this point or to continue skipping (looking, say, for the third or fourth selection on the tape), or you may want to rerecord a faulty take you've just rewound—a use for which APFS behaves much like a memory rewind, but without the need to index the counter.

Your tapes must be recorded with a pause between numbers (no disco treatment) if APFS is to work, and Optonica has added the ingenious SPACE control for that purpose. With this switch on and the RT-2050 set for recording, all you have to do is press PAUSE at the end of one selection and release it at the beginning of the next. The deck automatically records 4 seconds (the standard spiraling space between numbers on discs, for example) of quiet before coming to a stop, saving you the job of cutting off the recording signal to create the space. (If you're recording from discs, with the 4-second spaces built in, you need not use the SPACE feature, of course.) Even without APFS, the SPACE would be handy in editing commercials out of FM broadcasts; with APFS, it is almost a necessity.

There are some other requirements of successful APFS use so fastidiously spelled out by Optonica in its manual that, at first, you may think the system too limited to be useful. It will not work, says Optonica, with speech, with quiet musical passages, or with recordings containing high inherent noise levels. And indeed for foolproof operation you do need music with more or less continuously high levels, separated by spaces with reasonably low noise.

The reason becomes apparent when you examine the sensing mechanism: an extra, small playback head that remains in contact with the tape even in the fast-wind modes. Both the output of this head from a given signal level and the duration of the spaces between numbers are influenced by the speed with which the tape passes it; this, in turn, depends on whether it is closer to the head or tail of the tape, the direction in which the tape is being driven, and the momentum that has built up in the wind drive. Therefore the sensitivity of the APFS triggering circuit is a compromise. If it is sensitive enough to "hear" low-level music at slow speeds, it may not stop for noisy internumber spaces at high speeds; if it can pick out the brief silences between numbers at high speeds, it may take pauses in speech (or music) as cueing spaces at slower speeds. Some sort of wind-speed equalizer might (on future models, and presumably at extra cost) increase the range of situations that APFS will handle without faltering. As embodied on the RT-2050, APFS is better suited to pop and rock than to classics or other music of inherently wide dynamic range.

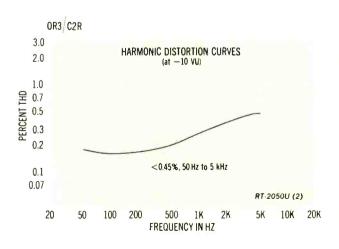
One example should show why this is so. We copied passages of Verdi's Otello on cassette, using both the SPACE switch and the discs' banding between acts to give APFS its cues. It picked them up faultlessly in rewind toward the head of the tape and in fast forward toward the end, where wind speeds are relatively high. In fast forward at the head and rewind at the end, however, APFS tended to stop in quiet passages (like Desdemona's "Willow Song") or dramatic pauses (like those in Jago's "Credo"). Toward the center of the tape, in either wind direction, only very low levels or very long pauses could "fool" the system.

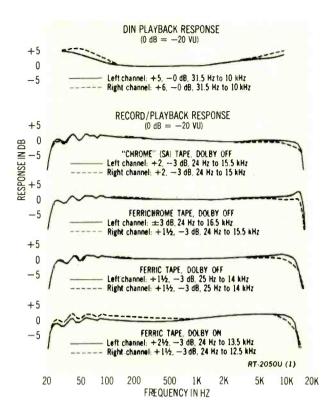
The owner's manual is printed in Japan. (We pause briefly while the grumbling subsides.) But while the language is often very unidiomatic and sometimes poorly proofread, the manual is more efficient at conveying useful information intelligibly to the American user than some British manuals we've used; it is average or above that for a Japanese manual. Its worst feature—which was almost its best—is the tape table. At first glance it looks superb: a comprehensive listing of tape types with clear, unequivocal, and logical specifications for BIAS and EQ. settings in their use. The catch is that the list is neither current nor prepared with the American buyer in mind. For example, Ampex is omitted and Sony Duad C-90s, Maxell chrome, and BASF ferrichrome—none of which has ever been available on the American market—are included.

Before discussing performance, let's look briefly at the physical characteristics of the RT-2050. It is a front-loader. a type that in the past we have found generally more complex and difficult to maintain than top-loaders. Optonica's design is no exception, though it supplies a little trapdoor above the well through which you can (with some difficulty) reach the heads for cleaning. There are separate recording-level controls for the two channels, a common scheme that makes balance adjustment easy, stereo fades difficult. Input (mike and line) mixing is not provided. The output control is welcome. The peak-reading meters, which are guite efficient, are not influenced by the output control and hence give "absolute" readings of recorded levels-a plus, in our estimation. Optonica adopts the common and desirable double three-way bias/equalization switching: two levers, each with positions for CRO, FE-CR, and NORM. The bias switch has three positions cross-referenced as HIGH, MID, and LOW; the eq. switch shows 70µs for the first two, 120µs for the third. This puts the tape matching among the more comprehensive-and comprehensibleon the market. There is no DIN socket (which we can easily do without) on the back panel; there are recording-level calibration controls, but they are intended for use by a service technician, rather than by the owner (and there is no built-in test oscillator in any event).

CBS tested the RT-2050 with Sony UHF as the "normal" tape, Sony Duad as the ferrichrome, and TDK SA (actually, of course, ferric tape specially designed for the purpose) with the chrome settings. Results with all three, though not exceptional, are certainly very good. A fourth option, using a high-performance ferric like Maxell UD or UDXL-1 with the MID (FECR) bias setting and the  $120\mu$ S (NORM) eq., proved very successful in home use as well. Other lab measurements are generally good or very good. The only respect in which we might call over-all operation substandard is admittedly one whose importance will vary with the user: The action of the PAUSE is not entirely silent, as it is on the better decks these days; it leaves a slight "pop" on the tape that can be intrusive in some situations.

This adds up to a \$300 cassette deck with all the functions and performance that one might take for granted at this price, plus the "free" extra of a unique random-access feature. We believe the latter to be capable of further development into a really significant advance in cassette convenience. In its present form it already strikes us as a valuable addition, though the worth obviously will vary with your musical tastes and playing habits: the more you value it, the greater the bargain the RT-2050U will represent. CIRCLE 133 ON READER-SERVICE CARD





Optonica RT-2050U Additional Data

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	Speed accuracy	1.2% fast at 105 VAC 0.5% fast at 120 VAC 0.2% fast at 127 VAC	
	Wow and flutter		
	Rewind time (C-60	82 sec.	
	Fast-forward time	79 sec.	
	S/N ratio (re 0 Vi playback record/play	U, Dolby off; CBS wei L ch: 48 dB L ch: 46½ dB	R ch: 481/2 dB
	S/N ratio (re 0 V playback record/play	U, Dolby off; unweigh L ch: 54½ dB L ch: 51 dB	
	Erasure (333 Hz a	t normal level)	70 dB
	Crosstalk (at 333 record left, play record right, pla	right	52 dB 51½ dB
	Sensitivity (re DIN line input mike input		R ch: 7 <mark>8</mark> mV R ch: 0.3 mV
	Meter action (re l		R ch: 1½ dB high
	Total harmonic d	istortion (at -10 VU) <0.45%, 50 Hz	to 5 kHz
	IM distortion (rec	ord/play, -10 VU) L ch: 3.5%	R ch: 3.5%
	Maximum output		R ch: 0.70 V

### The Hegeman Probe: Probity for Low-Level Inputs

The Equipment: Hegeman Input Probe (HIP), a loadmatching device with optional gain of 12 dB for use between phono pickups and preamplification stages, in metal case. Dimensions: Probe, 6% by 2% by 1½ inches; power supply, 5% by 5 by 1½ inches. Price: \$160 (including AC power supply). Warranty: "limited," two years parts and labor. Manufacturer: Hegeman Laboratories, Inc., 555 Prospect St., E. Orange, N.J. 07017.

Comment: If we were to anticipate the thrust of Hegeman Labs's projected electronics line from its first exemplar, the Input Probe, we would bet on a series of novel, useful accessories aimed at the audiophile perfectionist. The Input Probe is a pre-preamp or buffer designed to take the output from a phono cartridge or tape head and deliver it to the phono input of the typical preamp. (A newer version, not yet introduced at this writing, dispenses with the tapehead designation in favor of one for moving-coil cartridges.) It has two gain settings: UNITY (X1) and TIMES-4 (X4), the former being recommended for magnetic phono cartridges and the latter for tape heads (or, now, low-level moving-coil pickups). There is no equalization in the Probe-just straight gain. (RIAA equalization is, of course, part and parcel of every phono preamp; it is assumed that, when used with a tape head, the Probe will be driving a playback preamp with the appropriate tape equalization.)

Why on earth would anyone want to buy a unity-gain prepreamp, which sounds as though it would do nothing at all? Nothing, that is, except provide a controlled termination for the cartridge. And to explain that statement, we must delve a little further into engineering than we normally would. In recent months, there has been growing concern in technical circles about the phono-cartridge/ preamp interface. Some phono cartridges produce audibly different results through different preamps, even though the preamps test out to be equivalent. The apparent reason for this anomaly is that preamps are tested for low-impedance, purely resistive networks, while the typical phono cartridge is a relatively high-impedance, complex network. Similarly, cartridges are measured with a simple resistor/ capacitor load while, due to the equalization, the input impedance of a preamp can vary with frequency in a complex manner. (This really depends on the circuit configuration used in the preamp and is why some preamps sound better than others with some cartridges.)

The Probe, then, is the marriage broker. It provides the simple load that the cartridge was designed to work into and "looks like" a simple resistive source to the preamp. And it does this quite nicely, as bench tests by contributing editor Edward J. Foster indicate.

Gain is very close to nominal values:  $\frac{14}{4}$  dB for X1 and 12½ for X4. (Multiplying a voltage—what the Probe is dealing with—by four increases it by 12 dB.) In the X4 position, the response is ruler flat in all our measurements, from 10 Hz to 100 kHz. In X1, the response is nearly as good: no measurable departures from flat between 100 Hz and 50 kHz, with a minute rolloff ( $\frac{14}{4}$  dB by 100 kHz) above and a slight rise (1 dB by 15 Hz) below the flat region. Gain balance between the channels is within 1/10 dB. The cross-talk is superb in the X4 setting, being better than 65 dB across the band, but (to our surprise) it proves different in the X1 setting; 48 dB at 1 kHz, improving to 60 dB at 15 kHz but degrading to 29 dB at 100 Hz and 16 dB at 20 Hz. This still should be more than sufficient.

The input overload point is slightly over 0.5 volt at any

frequency in the audio band on either gain setting. Thus, while something over 2 volts can be supplied cleanly in the high-gain setting, the output level is restricted to 0.5 volt in the unity-gain position. This should be adequate for any magnetic cartridge and recording level we know of, although we would point out that, since there is no equalization in the Probe, it will have to handle a much greater high-frequency level than would appear to be the case at first.

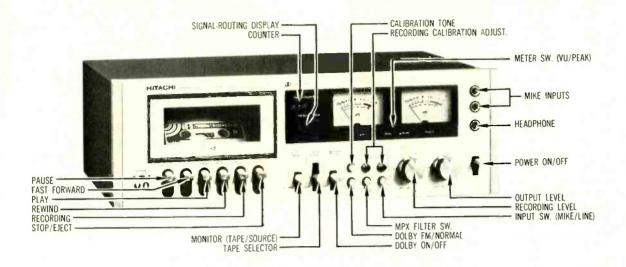
The noise is admirably low, with a signal-to-noise ratio of 103<sup>3</sup>/<sub>4</sub> dB (referenced to a 0.5-volt output) in the X1 mode, and 107 dB (referenced to a 2-volt output) in the X4 mode. Referenced to the input, the noise levels are  $-109^{3}$ /<sub>4</sub> dBV and -113 dBV, respectively. THD is also adequately low for all practical purposes, the distortion products being buried in the residual noise at input signal levels below 100 mill-ivolts. Even with a 300-millivolt input, total harmonic distortion remains in the neighborhood of 0.1% in X1 and 0.17% in X4, for both channels and any frequency within the audio band.

So the Probe is quite neutral as far as response, noise, and distortion go. But does it provide the controlled load and source impedance that are its raison d'être? Happily, yes. A special test was devised to check these characteristics. In the TAPE input mode, the Probe exhibits an input impedance equivalent to a 865,000-ohm resistor (a value we understand is being reduced to approximately 1,000 ohms in the newer version) shunted by a 35-picofarad capacitance. In the PHONO mode, the equivalent input impedance is 65,500 ohms in parallel with 34 picofarads-a rather unusual resistive load. Perhaps Hegeman thought to split the difference between the old 47,000-ohm standard and the newer 100,000-ohm loads specified for CD-4 cartridges. In any case, the input capacitance is adequately low for CD-4 pickups, especially since the Probe can be located right at the turntable with very short input cables. A check of the Probe's output impedance indicates values of 15 ohms (in the X4 position) and 250 ohms (in the X1 position). It will drive any audiophile preamp we know of, even with 20 feet, and perhaps more, of interconnecting cable.

Our Probe is powered by eight C cells. Our measurements show that you can expect to get better than three months' use out of a battery set when using the Probe four hours per day. Hegeman warns you to turn the Probe on five seconds before powering up your system and to leave it on at least five seconds after the system is turned off. Heed the recommendation. Large transients are generated during turn-on and turn-off, and they might damage your speakers. Leaving the newer AC power supply on full time—even when the stereo system is off—should scotch any potential problems.

We like what we hear when we listen to magnetic cartridges through the Probe. The noise level is inaudible at normal volume settings—a sore point with some add-on preamps—and the distortion undetectable by our ears. What we do hear is an improvement in the high-end response of the cartridge: better transients, more detail, a general improvement in clarity and crispness. The degree of improvement depends upon the cartridge used. Some are notably blasé about loading; others are more persnickety. With the finicky, the Hegeman Input Probe is likely to make a substantial improvement in sound quality over many preamps.

CIRCLE 134 ON READER-SERVICE CARD



### Hitachi D-800: Three Heads in Two, Plus Animation

The Equipment: Hitachi D-800, a Dolby stereo cassette deck in metal case. Dimensions: 17½ by 5½ inches (front panel); 11½ inches deep plus clearance for controls and connections. Price: \$450. Warranty: "limited," three years parts and labor. Manufacturer: Hitachi, Japan; U.S. distributor: Hitachi Sales Corp., 401 West Artesia Blvd., Compton, Calif. 90220.

**Comment:** There are three-head cassette decks, and there are three-head cassette decks. On some decks the monitor head is little more than a toy. It does play the tape; it does provide a monitoring function—after a fashion. But the response from these heads is a throwback to the days when cassette recorders were first introduced. For serious playback, these so-called three-head decks still rely on a combination record/play head. Then there are "true" three-head decks—those that not only have separate record and play gaps, each optimized for its function, but use them exclusively for their respective functions. The Hitachi D-800 is such a deck.

Rather than employ two physically separated heads and hassle over the problem of alignment when different cassettes are inserted, Hitachi uses a dual head (recording and playback) in a single housing. Azimuth alignment therefore can be adjusted "permanently" during manufacture, as with a combination record/play head. And, since the two sets of gaps are extremely close together, monitoring occurs practically instantaneously.

As today's systems become more intricate, we see more high-end equipment with signal-flow or block-schematic diagrams silk-screened somewhere on its anatomy. These flow charts help tell the forgetful what's going where. Hitachi has carried the practice one step further, with what might be called animation. On the front panel is a threecolor illuminated display, indicating the signal routing for any combination of switch settings. In the recording mode, the recording block glows red, showing the signal flow from the input through to the recording head. If the monitor switch is in the TAPE position, a green legend shows the flow from the playback head through the amplifier to the output. In SOURCE, the playback head is dropped out of the picture and the signal flow is from the recording amp through the playback amp to the output. Color this white. At any time, you can see just where the signal you are hearing is coming from. Not a necessity, perhaps, but clever.

The front-loading cassette well on the D-800 is a notch above many we've seen. In particular, cleaning is exceptionally easy because the heads are at the back of the well, making them visible and accessible from the front. You can spot tape motion (thanks to the hub spindles) fairly easily, but not the cassette's window to see how much tape is left. The cassette must be slid into a holder rather than just placed on the tray. It's a bit more difficult, but once in place the cassette is held very securely.

The controls are logically grouped and more extensive than on most decks. Besides tending to the needs of "normal" (ferric) and chrome tapes, the deck provides for ferrichrome. Dolby calibration controls and multiplex-filter switching are up on the front panel where they belong. Another goodie is the Dolby-FM circuitry, which will produce Dolbyized cassettes directly from Dolby broadcasts, even with a tuner or receiver that has no provision for them. And, with the monitor switch in the SOURCE position, you can decode Dolby broadcasts for listening, whether or not you record them. The Dolby-FM calibration controls on the back panel are used to set the recording level during transmission of a Dolby calibration tone (if you're lucky enough to be awake when it is transmitted). Once set, they needn't be readjusted for other stations of reasonable signal strength. The front-panel recording level controls are inactive in the Dolby-FM mode; once the calibration is properly set, so is the recording level-for better or worse, depending on the station's modulation practices.

Also on the back panel is an output pushbutton that prevents the feedback and oscillation that can occur when a monitor-head deck's internal switching arrangement is incompatible with the amplifier's; in the OFF position, during recording, you lose the tape-monitoring capability via the D-800's monitor switch and must use that on the amplifier instead. All this is carefully explained in the instruction manual in what passes for English. (We'd seriously recommend that Hitachi commission whoever wrote its last para: graph, which is entirely intelligible, to rewrite the rest of the opus.)

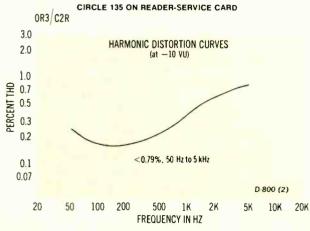
Lab data taken at CBS Technology Center indicate a level of performance that, in some respects, we have come to expect only from premium cassette decks. Hitachi's recommended ferric is its UD (evidently identical to Maxell's UD). Most tests were made with it; frequency response was measured with UD, Sony Ferrichrome, and Fuji chromium dioxide. Flutter content on the D-800 is exceptionally low, and the speed accuracy is very good and entirely uniform at all tested line voltages. Fast-winding times are a trifle on the slow side. The playback response is typical of the highest-quality decks; though the record/play response may not be up with the best we've seen, it certainly is estimable. (The high-end droop that seems to characterize the right channel on all three tapes can probably be attributed to a slight equalization or biasing problem on our test sample and therefore is not necessarily endemic to D-800s.)

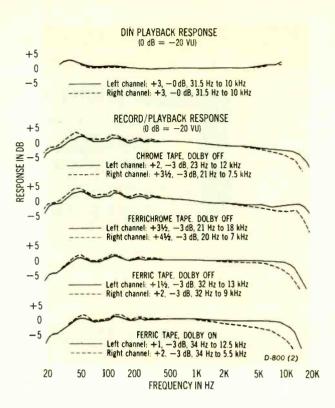
Signal-to-noise ratios, both weighted and unweighted, are on a par with today's better decks, and a check of Dolby action indicates that it does indeed provide the theoretical 10-dB reduction in high-frequency noise. The harmonic distortion is much lower than average—in fact, quite close to the best we've measured to date. The IM distortion figure also is very encouraging. We anticipated (rightly) a very pleasant listening session, for we've often been finding a correlation between cassette decks that sound good and those that exhibit low IM in the bench tests.

Setting the recording level proves quite simple and precise. The two knob elements are tightly coupled and, once set for channel balance, move together. The output control operates in the same fashion. With the latter set at MAX, the level match—source to monitor—is right on, and that also makes monitoring easier.

The meters are generous in size, and—especially in the peak-reading mode—appear to give an accurate indication of musical dynamics. (The alternate VU mode is less to our taste.) On typical music, the peak indication is about 3 or 4 dB higher than the VU reading, which (together with the calibration of the meters on our sample, which—because they "read high"—show 0 VU for a recorded level 6 dB below the DIN reference standard) pretty much assures that the peaks will remain undistorted if the meters stay out of the red.

Although we achieved excellent replicas of source material on all three tapes for which the D-800 is designed, we'd opt for the chrome and chrome equivalents, since they have a slight edge in high-end response and slightly lower noise than the competition. And the sound is no disappointment: We'd rate the D-800 among the better decks we've auditioned.





Н	itach	i D-8	00 Ad	ditional	Data
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	Speed accuracy	0.2% slow at 105, 120, & 127 VAC	
	Wow and flutter	playback: 0.04% record/play: 0.06%	
	Rewind time (C-6	i0 cassette)	91 sec.
	Fast-forward time	(same cassette)	86 sec.
	S/N ratio (re 0 VU playback record/play	l, Dolby off; CBS weigh L ch: <mark>54½</mark> dB L ch: 52 dB	R ch: 541/2 dB
		, Dolby off; unweighte	
	playback record/play	L ch: 52 dB L ch: 51½ dB	R ch: 53 dB R ch: 51½ dB
	Erasure (333 Hz a	it normal level)	67 <mark>d</mark> B
	Crosstalk (at 333 record left, play record right, pl	y right	33 dB 33 dB
	Sensitivity (re DI		
	lîne input mîke input	L ch: 100 mV L ch: 0.52 mV	R ch: 118 mV R ch: 0.55 mV
	Meter action (re		R ch: 6 dB high
	Total harmonic d	istortion (at -10 VU) <0.79%, 50 Hz t	o 5 kHz
	IM distortion (red	cord/play, ~10 VU) L ch: 4.0%	R ch: 4. <mark>0%</mark>
	Maximum output	(re DIN 0 VU) L ch: 1.1 V	R ch: 1.1 V

### Now we've mastered a Scotch cassette for every switch position.



**Introducing the Master Series.** Three totaliy different tapes. Each developed to deliver the truest, clearest sound possible at each tape selector switch position.

Our Master I cassette is for normal bias recording. It features an excellent dynamic range, low distortion, uniform high frequency sensitivity and output that's 10 dB more than standard tapes.

Our new Master II replaces chrome cassettes and is designed for use on hi-fi stereo systems with chrome bias (70 microsecond equalization). It features some spectacular performance characteristics, includir g a special coating that gives it a 3 dB better signal-to-noise ratio at low and high frequencies than chrome cassettes, yet it's less abrasive.

Our new Master III is for the ferri-chrome setting. It's formulated with the most advanced technology available, giving a 3 dB output improvement at low frequencies and 2 dB at high frequencies. And the unique dual layer construction increases both low ar.d high frequency sensitivity over chromium dioxide and ferric axides.

All this, plus unique inner workings you can actually see. Our new Master line has a special bonus fecture. A precision molded clear snell that allows you to monitor the inner workings of the cassette. You can actually see the recorder head penetration and the unique roller guides in action. Look closely at the transparent shells above and you'll see the water wheels which were specially designed to move the tape evenly across the head, reducing friction and noise. And two radially creased shims insure smoother wind, improved mechanical reliability and reduced wow and flutter.

Enough said. Now it's time for you to take the true test. Match up the right Master cassette with the bias you prefer. Then just listen.

You'l! find that whichever switch position you use, a Scotch Master is the way to get the most out of it.

Scotch Recording Tape. The truth comes out.



### Step by Step through Our Tape Recorder Tests

How lab reports arm you to choose a recorder or deck

by Edward J. Foster



WITH THE BLOSSOMING of the cassette as a viable high fidelity recording medium, tape decks finally began widespread infiltration of home music systems. Open-reel machines still are around, and other formats have been and are being introduced, seemingly to remain underdogs, for the convenience of the cassette remains unexcelled. But it does have its foibles. Editing is more difficult than on open reels or on the newly introduced Elcaset. and the narrow track width and slow tape speed provide less dynamic range and high-frequency response. For live recording, open-reel decks have a sizable advantage. But for the majority of audiophile taping-dubbing records or recording FM broadcasts-a good cassette deck can be fully equal to the task.

Distinguishing good from mediocre tape equipment is not always easy. There is an ocean of specifications that characterize a tape deck, and a number of different standards and methodologies that are employed to derive those specs. And, of course, some specs are more crucial than others. In this guided tour of our review procedures I'll point out the areas that we think most important. The major emphasis will be on the cassette deck; since the tests and their interpretation are similar for open-reel and cassette decks, I'll point out the differences only as they arise.

With tape equipment (as with record players), the most important mechanical spec is wow and flutter: the short-term speed stability of the transport. There are a number of standards that can be followed. HF's reviews, based on CBS Technology Center lab tests, follow the ANSI/IEEE standard (again, as with record players), which is basically the same as the German DIN standard. It specifies the measurement of the peak speed deviation, after suitable weighting-to take into account the relative annoyance of the deviation-and integrating wow (slow variations) with flutter (faster ones). The total is expressed, in percent, as a ratio of the peak speed deviation to the average speed of the tape. Of all wow and flutter standards, this one most closely corresponds to audibility. It also happens to be one of the most rigorous, so many manufacturers opt for a more forgiving weighted rms (WRMS) measurement. Don't be surprised if the numbers in our test results differ from manufacturers' claims.

We report two wow-and-flutter figures: one for playback only and one for record/play. The former is measured using a test tape that presumably has been recorded on a deck with extremely low flutter. According to the standard, it is the "preferred" measurement. The record/play flutter is derived by recording and reproducing a tape on the deck in question. Since the flutter is introduced twice—first in recording and again in playback—this figure is generally worse than that measured in playback alone. On occasion, the R/P flutter is the same as the playback flutter, which generally indicates that the tested deck is as good as, or better than, the deck on which the test tape had been made.

The lower the flutter figure, the better. On cassette decks, a playback figure of  $\pm 0.06\%$  to  $\pm 0.07\%$ is very good. From open-reel decks, with their higher speeds, larger capstans, and higher inertias, we would expect even better figures-more like  $\pm 0.03\%$ .

In our view, the absolute speed accuracy of the deck is far less important than its flutter. A speed error of ½% to 1% will go unnoticed by the vast majority of listeners. However, if the speed figure changes with line voltage, it is possible that a waver in pitch might be heard when, say, a heavy appliance switches on. We report the speed error at AC line voltages of 105, 120, and 127 volts.

Fast-forward and rewind times are more indicative of convenience than anything else. The average cassette deck will shuttle a C-60 cassette in 80 seconds or so, while the average open-reel deck will spool 1,800 feet of tape in about 95 seconds. Assay your patience, and judge from there, keeping in mind that the slower the wind, the gentler the tape handling tends to be.

The most important electrical specs are frequency response, signal-to-noise ratio, and distortion. All electrical record/play measurements depend on the tape used. We try to ascertain from the manufacturer the tape used in deriving the specs and use that tape in making our measurements, identifying it by name. Failing that, we make the best match we can and advise our readers of the assumptions involved. The data are accurate only for the tape with which they were measured. When more than one type of tape is suited to the deck (e.g., ferric oxide, chromium dioxide, and ferrichrome), we'll repeat the record/play frequencyresponse plots for each; other measurements are made just with the ferric-oxide tape.

The first frequency-response measurement is the playback response, which indicates how accurately the deck will reproduce a prerecorded tape. That the curve extends only from 31.5 Hz to 10 kHz for cassette decks and 50 Hz to 15 kHz for openreel decks operating at 7½ ips reflects the limited set of tones on the standard test tapes. The deck may respond beyond this range, but this test won't show it. The standard cassette test tape uses a lowfrequency boost below 100 Hz-the original Philips standard. However, as the cassette became a music medium rather than just a dictation tool, manufacturers broke with the old standard and adopted one with a 50-Hz turnover point to achieve extra low-frequency headroom. The net result is that many cassette decks show a rise below 100 Hz when measured with a "standard" tape. This is not a problem, as the new standard is very nearly universal in prerecorded cassettes.

Record/play responses are shown for each channel, using each of the tape types for which the deck is adjusted, and without a noise-reduction system. The test using ferric-oxide tape is repeated with the noise-reduction system turned on to show its effect on the frequency response.

It is not unusual to see undulations at the lowfrequency end of response curves, especially on cassette decks. The so-called head bumps (they are occasioned by relationships between head geometry and recorded wavelengths) ordinarily are inaudible if the variations remain within a couple of dB of nominal and are gone by the time frequency rises to 100 Hz. From the midbass to the upper treble, we look for the smoothest, flattest response possible—at least within  $\pm 2$  dB. Generally, a response that rises to a peak at the high end before collapsing is an indication that too little high-frequency bias is being supplied to the recording head for the tape in use; one that slopes off gradually suggests the opposite. Neither is desirable.

Though we would like the most extended high end possible, a cutoff above 15 kHz is about par on cassette decks. Substantially more can be expected from open-reel decks, which often extend to 20 kHz and beyond. Usually the high-end response of a cassette deck with chromium-dioxide (or equivalent) tape exceeds that of the same deck with ferric-oxide tape. A close match between the response curves on the two channels should indicate a stable stereo image. The noise-reduction system is likely to exaggerate any peculiarities in the basic response. It tends, for example, to make the high-end response fall off somewhat more sharply. Gross differences between the curves taken with the noise reduction on and those taken with it off, however, signify an improper adjustment.

The record/play response curves of a cassette system are measured at a -20-VU recording level: 20 dB below DIN "0 VU." They don't really represent the total performance of the deck, since the tape is likely to saturate at high frequencies as recording levels increase. (Some manufacturers spec their decks at -30 dB and may claim better response than we measure. We consider a test at this unrealistically low recording level potentially misleading.)

Open-reel decks are measured at -10 VU: 10 dB below Ampex "0-VU" level. Although the openreel tape also will saturate eventually at the higher frequencies, the better decks and tapes of today will generally manage even a 0-VU recording level.

Originally, all of HF's signal-to-noise measurements were made on an unweighted basis. In 1976, however, we also started to report weighted noise measurements for tape equipment. The weighting curve we employ is the result of research at the CBS Technology Center and is meant to give a bet-

	OPEN-REEL
Response	Equal to virtually any recording demand
Dynamic range	Even without ancillary equipment, sufficient for all but the most demanding recordings
Wow and flutter	Generally, vanishingly low
Bulk and cost	Compact and/or inexpensive models rapidly disappearing
Convenience	Not a strong point
Editing	Physical splicing fairly easy on decks engi- neered for the purpose, difficult on others; tight electronic editing (while copying) gener- ally difficult or impossible
Multitrack use	Quadriphonics, overdub, etc., available in specially engineered decks (sometimes, as add-on accessories or outboard connections)
Interfacing	Professional and component types available
Availability	Fair choice, widely distributed
	Dynamic range Wow and flutter Bulk and cost Convenience Editing Multitrack use Interfacing

ter indication of the subjective loudness of the noise. Since the CBS curve emphasizes noise in the region between 1 and 10 kHz (as its research indicates our ears do), it is possible for the weighted noise measurements to be worse than the unweighted measurements. On average, we get the same sort of numbers either with or without the weighting, but the weighted measurements should be the more meaningful.

The S/N data are taken in the playback mode (where basic tape noise and playback-head and amplifier noise are taken into account) and also in the record/play mode. Since the latter test also includes the noise generated in the recording amp, plus the bias oscillator and the biased-tape noise. the figure will generally be worse. On cassette decks, the average playback noise (unweighted) comes in at about 53 dB below the DIN 0-VU level. In the record/play mode the average figure is about 51 dB. (Dolby noise reduction in theory adds about 10 dB in the range to which the ear is most sensitive. This is checked by a spectrum analyzer, which shows not only the difference in noise content with the Dolby circuit on and off, but any unusual quantities of AC hum as well. Where necessary, we comment on any anomalies that show up in this test.)

On open-reel decks, the average figures are about 57 and 53 dB, but, since their reference 0-VU

level is much farther below the limits of undistorted recording, these decks are quieter than cassettes by more than this small difference would imply. The larger the S/N ratio, the better.

In comparison with amplifiers or tuners, tape recorders sound better than their harmonic and IM distortion figures would suggest. The most likely reason is that the harmonics generated in a tape deck are of low order (predominantly third) and are less annoying than some of the higher orders that can be created in a strictly electronic device. By custom, we report the THD figures that correspond to a recording level 10 dB below DIN (or Ampex) zero reference. You can expect that the distortion will become greater as the recording level increases—to a greater extent on cassette than on open-reel equipment.

We limit the highest test frequency to 5 kHz on cassette (10 kHz on open-reel) equipment since the limited frequency response of the deck would merely filter out the third harmonic of higher test frequencies and result in an unrealistically low reading. Typically, THD is minimal in the region between 200 Hz and 1 kHz, rising gradually at higher frequencies and more rapidly at lower frequencies. An average cassette deck might exhibit a THD of 1¾% or less from 50 Hz to 5 kHz. Open-reel equipment—with, say, 1¼% to 1½%—is a bit better. IM distortion on an open-reel deck is about the

CASSETTE	ELCASET	EIGHT-TRACK
Excellent, though some audible loss with top- quality signals on all but best decks	Comparable to open-reel	Seldom better than fair
Approximately equal to good-quality FM broadcasts and commercial discs	Comparable to open reel, particularly if noise reduction is used	Comparable to cassette
Very low in better decks	Very low	Often unacceptably high
Even small and inexpensive models have sur- prisingly good quality today	Comparable to most elaborate for cassette	Good; but smallest, least expensive units o ten of unacceptable quality
Best ever in tape	Potentially, even better than cassette	Excellent for playback; poor for recording
Physical splicing too difficult for all but emer- gency use: electronic editing usually very ef- ficient, via quick-acting pause control	Physical splicing possible; electronic editing almost as efficient as cassette	Forget it
Matrixed-quad potential only	Initially, for matrixed quad only; other forms possible in future	Discrete quad (Q·8) available; overdub, etc unavailable
Component, mass-market, automotive, and professional types available	Component and professional use projected	Automotive, mass-market, and componer types available
Extremely wide range of models easily found	Extremely limited	Fair choice, very wide distribution

same as the THD but usually is much higher on cassettes. (The average is about 5½%.) We have found that the best-sounding cassette decks have the least IM; 3% is a good neighborhood.

The erasure data indicate how cleanly the erase head will wipe the tape of previously recorded information. Typical modern decks have quite good erasure figures, 66½ dB being average for cassettes and 70½ dB being typical of open-reel equipment. With figures like these we'd doubt that you could hear the previous program even during the quietest passages of the new.

Crosstalk (or, more properly, channel separation) denotes the amount of signal that leaks through from the left channel to the right and vice versa. Because of the wider track spacing on openreel decks, they generally do better than their cassette cousins—on average, about 56 dB, compared with 38 dB, Nonetheless, even 38 dB seems more than adequate and is, in fact, better than the figures for some stereo tuners and most phono pickups.

When considering sensitivity (the input signal level required to reach the reference 0-VU recording level) and maximum output (the signal level delivered from a standard 0-VU recording). it is fruitless to speak of averages. You must compare these figures with the specs of your other equipment (microphones and preamp) to see if the deck is compatible with them. As long as the maximum output level is equal to or (preferably) greater than the rated sensitivity of the preamp's tape inputs, you should be okay. The sensitivity figures of the deck should be less than the rated preamp (or mike) output levels.

Since different manufacturers calibrate their recording meters differently, we report the indicated meter reading required to achieve a standard recording level. Don't interpret this as a check on accuracy or correctness, but rather as a guide to using the deck. If the meter on a deck reads "4 dB high" while that of another deck reads "1 dB high." it simply means that the manufacturer has made a different choice in the relationships between meter action, meter sensitivity, and the onset of tape overload. Peak-reading meters, for example, will normally have a 0 dB closer to the DIN standard than averaging meters because the latter respond less accurately to brief transients and consequently need more headroom "safety factor."

Tape recording is a hands-on operation. There are many subtle differences between decks that make one easier to use than another—such as a quick-acting pause control, built-in mixing facilities, and memory rewind. You will find the personal reaction of our reviewers reflected in each report. There is much said that can't be expressed in mere tables and graphs.

### Buyer's Guide to Cassette, Elcaset, and Open-Reel Equipment

As WE DID with the directory of turntables, tone arms, and cartridges in our April issue, we have omitted all manufacturers' performance claims in the listings that follow because the variety of measurement techniques and weighting systems renders comparison of such specs risky. But the measurement data HF publishes are directly comparable, so where appropriate we have indicated the date of an issue in which a HF test report of the product appeared.

Included in this buyer's guide is cassette, Elcaset, and open-reel equipment that can be used as part of a home component system. Quality battery-portable decks are listed, but combinations (tape/radio and the like) and endless-loop cartridge and automotive units aren't. Prices are based on manufacturers' suggested retail values and are rounded to the nearest \$5 point. No cassette or Elcaset equipment selling for less than \$150 is listed; the price range for open-reel decks is \$200 to \$2,000.

In the cassette section, it may be assumed that a unit offers Dolby noise reduction unless otherwise specified in the notes. "Auto shutoff" is indicated if the deck disengages the drive when the motor shuts off. In the open-reel section, a unit may be assumed to have no noise reduction unless otherwise specified.

Abbreviations: E = erase; E/R = erase/record; R = record only; R/P = record/play; P = play only.

Brand (Distributor)	Model	Price (\$)	Lo	ad	lan	rew.	toff	ter	control	Headphone output	ing -	Heads	N	eter		
			Top	Front	Bidirectional	Memory rew	Auto shutoff	Peak limiter	Auto gain control	Headpho	Input mixing		Average	Peak	Peak LEDs	
Advent	201A	400	¢				0					1Ê, 1R/P		128		
Aiwa (Meriton)	AD-1250	2 <mark>30</mark>	*				\$			*		1E, 1R/P	17		4	
	AD-6300	250		a)e			÷			\$		1E, 1R/P	252		0)0	
	AD-1600	360	8.			2	¢			ψ.	4	1E, 1R/P	ajte		s)e	
	<mark>AD-650</mark> 0	370		2)8		¢	5(6			*		1E, 1R/P	*		3)E	
	AD-1800	450	o			中	2(5			2	12	1E, 1R/P	47		N.	
Akai	CS-702D	200		\$				\$		4		IE, IR/P	0		- 8	
	CS-707D	2 <mark>75</mark>		¢.		à.	10	52		۵		IE, IR/P	٥			
	GXC-310D	400	4			Ф	10	-14		٠		1E, 1R/P	2,2			
	GXC-710D	425		*		\$	\$	\$		¢		1E, 1R/P	100			

### CASSETTE EQUIPMENT

Line inputs; bias/eq. switch; 400-Hź Dolby calibration tone; 4-pole AC motor

Notes

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; DC servo motor; cue and review; HF test report, 4/77

Mike and line inputs; separate bias and eq. switches; FM.mpx filter switch; DC servo motor; cue and review

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; AC synchronous motor; cue and review

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; servo motor; cue and review

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; AC synchronous motor; cue and review

Mike and line inputs; DC motor

Mike and line inputs; bias/eq. switch; FM mpx filter switch; DC motor

Mike and line inputs; bias/eq. switch; ADR\*; 4-pole synchronous motor

Mike and line inputs; bias/eq. switch; ADR; 4-pole synchronous motor

\*ADR: Automatic Distortion Reduction

Brand (Distributor)	Model	Price (\$)	Lo	ad	le		h	SI I	Auto gain control	Headphone output	ßu	Heads	N	leter		
			_		Bidirectional	Memory rew	Auto shutoff	Peak limiter	gain	phon	Input mixing		age		Peak LEDs	
			Top	Front	Bidire	Mem	Auto	Peak	Auto	Head	Input		Average	Peak	Peak	
	GX <mark>C-325</mark> D	500	a(:			2(8	12	2)2		*	*	1E, 1R <mark>,</mark> 1P	*			
	GXC-730D	500		-	R/P	4	\$	44		23		2E, 1R/P		\$		
	GXC-740D	<mark>535</mark>		e)z		2(2	2/2			<i>ξ</i> t	12	1E, 1R, 1P	\$			
	GXC-760D	635		43		\$)t	aja			s)#	\$	1E, 1R, 1P		*		
	GXC-570D	875		sje		X):	ŵ			<b>4</b>	đ	1E, 1R, 1P		s)e		
Bigston	BSD-300	170		4			sje			4		1E, 1R/P	2)2			
	BSD-400	2 <mark>50</mark>		1)1		-	*			10	13	1E, 1R/P	*	τ <u>ν</u>		
Craig	H221	170		*			¢			¢		1E, 1R/P	*			
	5201	250		10		×	\$			1/2		1E, 1R/P	2)2			
Dual (United Audio)	C-919	450	2[2			s\$2	8 <sup>1</sup> 1	¢		a(z	12	1E, 1R/P	*			
	Auto/Reverse	500	2)X		Ρ		317	\$		*		1E, 1R/P	4			
Fisher	CD-4020	160		20			\$					1E, 1R/P	塘			
	CR-5110	230		-			2]¢	1	1			1E, 1R/P, 1P	*			l
	CR-5115	250		\$			*			aje		1E, 1R/P, 1P	*			
	CR-5120	350				ŵ	*	X)S		10		1E, 1R, 1P	2)8		ste	
Harman-Kardon	HK-2000	4 <mark>60</mark>	sje			3/6	132			2)4	nje	1E, 1R/P		-#	0	
Heathkit	AD-1530	2 <mark>90</mark>	10			aja	ψ			afe.		1E, 1R/P	2/10		s(s	
Hitachi	D-410	200		a)z			3,2			ajs		1E, 1R/P	1			
	D- <mark>350</mark> 0	• 4 <mark>00</mark>	aţa			1(1	\$			*	\$	1E, 1R, 1P	zi:	4		
	D-800	450		ste			st.,			3/2		1E, 1R, 1P	\$	2,5		
JAC	KD-15	200		상			4			a)e		1E, 1R/P	1/2		-	
	KD-35	260		ste			4			sje	2	1E, 1R/P	\$		\$	
	KD-2	300	*				4			2/2		1E, 1R/P	2/4			
	CDS-200-2	300		ŵ						٠		1E, 1R/P	aţe			
	CD-1770	3 <mark>00</mark>	*			\$	-			\$	2,2	îE, 1R/P	32		ą:	
	CD-1636	350	z(z				*			4		1E, 1R/P	12			
	KD-75	380		÷		*	121			12	9	1E, 1R/P	\$		<i>\$</i> \$	

Notes	
Mike and line inputs; bias/eq. switch; ADR; AC servo motor	
Mike and line inputs: bias/eq. switch; ADR; 4-pole synchronous motor	
Mike and line inputs; bias/eq. switch; ADR; FM mpx filter switch; AC servo motor	
Mike and line inputs; bias/eq. switch; ADR; FM mpx filter switch; AC servo motor, 2 hub motors	
Mike and line inputs; bias/eq. switch; ADR; FM mpx filter switch; AC servo motor, 2 hub inotors; HF test report, 2/77	
Mike and line inputs; separate bias and eq. switches; DC motor; cue and review	
Mike and line inputs; separate bias and eq. switches; DC motor; cue and review	
Mike and line inputs; separate bias and eq. switches; DC motor	
Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor	
Mike and line inputs; bias/eq. switch; Dolby FM circuit; synchronous motor	
Mike and line inputs; bias/eq. switch; 400- Hz Dolby calibration tone; synchronous motor; HF test report, 8/75	
Mike and line inputs; bias/eq. switch; DC motor	
Mike and line inputs; bias/eq. switch; DC motor	
Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor	
Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; DC servo motor, hub motor	
Mike and line inputs; bias/eq. switch; Dolby iest signal; FM mpx filter switch; HF test report, 8/76	
Mike and line inputs; bias/eq. switch; tape transport assembled; electronics in kit form	
Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor	
Mike and line inputs; bias/eq. switch; FM mpx filter switch; 4-pole AC synchronous motor	
Mike and line inputs; bias/eq. switch; Dolby FM circuit; FM mpx filter switch; Dolby test circuit; DC servo motor; HF test report, 8/77	
Mike and line inputs; separate bias and eq. switches; DC motor; timer operation	
Mike and line inputs; separate bias and eq. switches; DC motor; timer operation	
Mike and line inputs; separate bias and eq. switches; super ANRS* (no Dolby); DC core- less motor; battery or external 6-volt operation	
Mike and line inputs; separate bias and eq. switches; super ANRS (no Dolby); DC motor; timer operation	
Mike and line inputs; separate bias and eq. switches; super ANRS (no Dolby); DC motor; timer operation	

Mike and line inputs; separate bias and eq. switches; super ANRS (no Dolby); DC coreless motor; built-in amp and speaker; battery or AC operation; HF test report, 7/76

Mike and line inputs; separate bias and eq. switches; super ANRS (no Dolby); DC motor; timer operation

\*ANRS: Automatic Noise Reduction System

#### CASSETTE

Brand (Distributor)	Model	Price (S)	La	ad					Introl	output	_	Heads	r	Meter	rs	
		(3)	•	Front	Bidirectional	Memory rew	Auto shutoff	Peak limiter	Auto gain control	Headphone output	Input mixing		Average	Peak	Peak LEDs	
			I op	Ē	Bic	Ř	Au	Pe	Au	ΗË	Ē		Av	ľ	Pe I	
	KD-95	500		i)r		\$	\$			¢	*	1E, 1R/P	4		*	Mike and li switches; calibration f operation
Kenwood	KX-620	220		2)2			s;c .			*		1E, 1 <b>R</b> /P	10			Mike and line
	KX-710	250	alte			200	a)e		1)1	*		1E, 1R/P	1/1		a i	Mike and lin
	KX-910	300	4			s(s	sţ¢		¢	٠	-14	IE, IR/P	4		*	FM circuit; I Mike and lir
Lafayette	RKD-100	160	3,5			. 3	0			2)¢		1E, 1R/P	\$			FM circuit; s Mike and line
	RKD-200	200		124		4	101			4		IE, IR/P	ø		¢	Mike and li
Marantz	5020	250		2(1		1.	*	aju		*	*	1E, 1R/P	2/2			switches; Di Mike and li
	5120	330	a(t			1	٥	10		\$		1E, 1R/P	z(c _		•	FM circuit; I Mike and lii
	5220	370		5/8			4	*		٠	-3	1E, 1R/P	42			FM circuit; I Mike and lii
		_														FM circuit; 5200 withou
	5420	430	¢			¢	٥	ale.		eļs	*	1E, 1R/P	¢.		4	(4) mike in switch; Dol identical Mo report, 4/76
Nakamichi	250	300	z(c				9					1P				Eq. switch; version of N
	<mark>350</mark>	350	4				\$			÷	-04	1E, 1R/P		4		(3) mike inp DC servo m
	500	400	à			\$	*	\$		25	*	1E, 1R/P		a(s		(3) mike inp eq. switche DC servo m
	550	<mark>50</mark> 0	17				۵	0		-	4	1E, 1R/P		*		(3) mike ing DC servo mo carrying cas
	600	500	2(1			13	2					1E, 1R/P		174		Line inputs 400-Hz Dolb can be rack as 600B for
	700 II	<mark>95</mark> 0		4		*	*			*	•	1E, 1R, 1P		*		(3) mike inp eq. switche DC servo m
	1000 II	1,450		ψ		¢	٠			*	142	1E, 1R, 1P		*		(3) mike ing eq. switche Dynamic No motor
Optonica (Sharp)	RT-1515	230		¢			e.	s(z		-11	2/2	1E, 1R/P	*		a(4	Mike and li switches; D
(0.12.))	RT-2050 Mk. II	300		0			3 <u>1</u> 2			*		1E, 1R/P		¢		Mike and li switches; C auto search
	RT-3535 Mk. II	43 <mark>0</mark>		0			4	*		\$		1E, <u>1</u> R/P	U.	*		Mike and li switches; FI 1VG hub mo
Pioneer (U.S. Pioneer)	CT-F4242	225		4			\$			æ		1E, 1R/P	a(*			Mike and lin
	CT-F6262	270		:(*			s(e			¢		1E, 1R/P	2,2	1011		Mike and lin motor
	CT-F7272	320		* *		ije Ko	0 #		19	2/2 :02		1E, 1R/P	2]e 2]e		-	Mike and lin
	CT-F8282	400										le, IR/P				Mike and li switches; D
	CT-F9191	450		12		alte.	101	τ':			13	le, IR/P	*		8	Mike and li switches; F motor

Notes

Mike and line inputs; separate bias and eq. witches; super ANRS (no Dolby); 400-Hz alibration tone; DC motor, hub motor; timer operation

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor; cue and review

Mike and line inputs; bias/eq. switch; Dolby FM circuit; synchronous motor; cue and review

Mike a<mark>nd</mark> line inputs; bias/eq. switch; AC motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor; identical Model 5200 without Dolby

(4) mike inputs; line/aux inputs; bias/eq. switch; Dolby FM circuit; DC servo motor; identical Model 5400 without Dolby; HF test report, 4/76

Eq. switch; DC servo motor; playback-only version of Model 350

(3) mike inputs; line inputs; bias/eq. switch; DC servo motor; 12-volt or AC operation

(3) mike inputs; line inputs; separate bias and eq. switches; 400-Hz Dolby calibration tone; DC servo motor

(3) mike inputs; line inputs; bias/eq. switch; DC servo motor; battery/AC operation; optional carrying case, \$50; HF test report, 8/75

Line inputs; separate bias and eq. switches; 400-Hz Dolby calibration tone; DC servo motor; can be rack-mounted; available in matte black as 600B for \$520; **HF test report, 8/76** 

(3) mike inputs; line inputs; separate bias and eq. switches; 400-Hz Dolby calibration tone; DC servo motor, hub motor

(3) mike inputs; line inputs; separate bias and eq. switches, 400-Hz Dolby calibration tone; Dynamic Noise Limiter; DC servo motor, hub motor

Mike and line inputs; separate bias and eq. switches; DC servo motor; auto search

Mike and line inputs; separate bias and eq. switches; DC servo motor, 1VG hub motor; auto search; **HF test report, 8/77** 

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; DC servo motor, 1VG hub motor: auto search

Mike and line inputs; bias/eq. switch; DC motor

Mike and line inputs; bias/eq. switch; DC servo notor

Mike and line inputs; bias/eq. switch; DC motor

Mike and line inputs; separate bias and eq. switches; DC motor, hub motor

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; DC motor, hub motor

Brand (Distributor)	Model	Price (S)	Lo	ad	10	Υ.	Ħ	~	ontrol	: output	50	<mark>Head</mark> s	N	/lete	rS
			Top	Front	Bidirectional	Memory rew.	Auto shutoff	Peak limiter	Auto gain control	Headphone output	Input mixing		Average	Peak	Peak LEDs
	CT-F1000	600		4		4	xie.	8		4	4	1E, 1 <mark>R, 1</mark> P	4		*
Realistic (Radio Shack)	SCT-14	150	\$							15		IE, IR/P	*		
	SCT-15 SCT-11	190 220		17 18			ē			* *		IE, IR/P IE, IR/P	\$ \$		
Rotel	RD-10F	270		*		¢	ŝ	*		\$	*	1E, 1R/P		13	
Royal Sound	RD-12F RD-20 RS-5700	340 370 225	0 0	**		4 4 4	0 8 4	\$ \$		2 0 0	51 42	1E, 1R/P 1E, 1R/P 1E, 1R/P		43 23 43	
	RS-5800	400		÷		z);	10	2)4		zje		IE, IR/P	\$:		¢
Sankyo	STD-1700	150		4						0		1E, <b>1R/P</b>	ŵ		1
	STD-1610	180	4					8		0,2		1E, 1R/P	¢		
	STD-1800	180		-0				¢		Φ.		le, IR/P	•		
	STD-1900	250	o):	\$						zţe		IE, IR/P	52		
	STD- <mark>2000</mark>	300		25		÷				248		IE, IR/P	str.		
Sansui	SC-1110	215		¢			*			43		IE, IR/P	aje		
	SC-1100	230		×.			*			0		IE, IR/P	¢.		
	SC-2100	330		aţe			N.			R(C		IE, IR/P	*		
	SC-3100	430		sţe.		4	4			4	0)4	1E, 1R/P	\$		Φ
	SC-5100	600		*		8	12	84		÷	13	IE. IR/P	zje		٥
Sharp	RT-1155	180		¢			a.			47		IE, IR/P	¢		۲
	RT-1165	200		10			\$	22		¢	¢	IE, IR/P	a'c		¢
Sonab	C- <mark>50</mark> 0	400	٥			3	â			10	50	IE, IR/P		ų,	
Sony (Superscope)	TC-117	160	10				a	Ø,		2 <sup>1</sup> 2		IE, IR/P	zje		
(Juperscope)	TC-118	200	\$				12	*		122		1E, 1R/P	*		
	TC-135SD	250	\$				*	242		٠		IE, IR/P	8]4		
	TC-136SD	300	1/2				*	ąc.		sje	2(1	1E, 1R/P	-10		
	TC-186SD	320		120			÷	٩		*		le, 1r/p	4		

#### Notes

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; 400-Hz Dolby calibration tone; DC motor, hub motor; closedloop dual-capstan drive system; pitch control

Mike and line inputs; bias/eq. switch; DC motor

Mike and line inputs; bias/eq. switch; DC motor Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC motor

Mike and line inputs; separate bias and eq. switches; DC motor

Mike and line inputs; bias/eq. switch; DC motor

Mike and line inputs; bias/eq. switch; DC motor Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor; timer operation

Mike and line inputs; bias/eq. switch; mechanically governed motor

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; separate bias and eq. switches; controlled DC motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; controlled DC motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; controlled DC motor

Mike and line inputs; bias/eq. switch; DC motor; auto start beyond leader

Mikeand line inputs; bias/eq. switch; DC motor; auto start beyond leader

Mike and line inputs; separate bias and eq. switches; timer operation; DC motor; auto start beyond leader

Mike and line inputs; separate bias and eq. switches; DC servo motor; timer operation; auto start beyond leader

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; DC servo motor, hub motor; timer operation; auto start beyond leader

mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

(3) mike inputs; line inputs; bias/eq. switch; headphone output level control; DC servo motor

Mike and line inputs; bias/eq. switch; no Dolby; DC servo motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; 400-Hz Dolby calibration tone; DC servo motor

Mike and line inputs; bias/eq. switch; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; DC servo motor

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; DC servo motor

#### CASSETTE

Brand (Distributor)	Model	P <mark>rice</mark> (\$)	Lo	Load		ew.	off	er	control	Headphone output	ing	H <mark>ead</mark> s	N	Aeter	
			Top	Front	Bidirectional	Memory rew.	Auto shutoff	Peak limiter	Auto gain control	leadphon	Input mixing		Average	Peak	Peak LEDs
	TC-206SD	380	F	*			NR A	*	A	*		1E, 1R/P	¥		*
	TC-138SD	400	*			1/4	*	*		s\$s	*	1E, 1R/P	4		
	TC-158SC	400	35				-	\$		25		1E, 1R/P	*		aja
	TC-209SD	510		zţr.		-	2	*		2/1		1E, 1R/P	\$		2)2
	TC-229SD	520		aĝa		4	4	a);t		*		IE, IR/P	*		alja
	TC-177SD	750	aje			aje	4	zja		¢		1E, 1R, 1P	*		
Superscope Tandberg	CD-302A 310 Mk. II	160 530	\$ \$				*	X <sup>2</sup> E		ф ф	* *	1E, 1R/P 1E, 1R/P	4	容	4
	T <mark>CD-330</mark>	1,000	s)e			*	*			-	*	1E, 1R, 1P		*	
Teac	A-100	200		-			*			2/5		1E, 1R/P	<i>8</i> /4		
	A-103	200		aja						48		1E, 1R/P	\$		8
	A-105	<mark>250</mark>		*						9 <b>%</b> 2		1E, 1R/P	256		
	A-150	250	F.	342		*	*			\$	*	1E, 1R/P	4		1(6
	A-170S	250	*				aje			372		1E, 1R/P	\$		
	A-400	<mark>30</mark> 0		sje			2]8			÷		1E, 1R/P	425		1/2
	A-420	350		*			aja			-	2]6	1E, 1R/P	25		斑
	A-303	400		1(1		sje	*			aja		1E, 1R/P		÷	
	A-480	450		\$		aja	2)E			202	2/4	1E, 1R/P	2/2		¢8
	A-640	500		\$		aj:	ų			*	3/2	1E, 1R/P		*	
	A- <mark>65</mark> 0	550		aŭr		¢¢.	ų,	**		172	*	1E, 1R/P	\$		*
Esoteric Series (Teac)	PC-10	500	ų				**	ŵ		ų		1E, 1R/P	*		48
	860	1,000		*		*	*	ațe.		-	*	1 <mark>e,</mark> 1r, 1p		\$	
Technics (Panasonic)	RS-263AUS	180	*			sis				称		1E, 1R/P		1/2	
(Fundsonic)	RS-615US	200		131		3]2				-		lE, lR/P	4		
	RS- <mark>63</mark> 0TUS	250		\$		sţe	5/4			4		IE, IR/P	sje	*	

Notes

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; DC servo motor

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; built-in power amps and speakers; DC motor

Mike and line inputs; separate bias and eq. switches; synchronous motor

Line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; servo motor, hub motor

Mike and line inputs; separate bias and eq. switches; FM mpx filter switch; 400-Hz Dolby calibration tone; synchronous motor; closedloop, dual-capstan drive

Mike and line inputs; bias/eq. switch

Mike and line inputs; bias/eq. switch; Dolby FM circuit; FM mpx filter switch; 3 motors; can be used vertically

Mike and line inputs; bias/eq. switch; Dolby FM circuit; FM mpx filter switch; 3 motors; can be used vertically; HF test report, 8/77

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; DC servo motor; HF test report, 5/76

Mike and line inputs; separate bias and eq. switches; DC servo motor; timer-control function

Mike and line inputs; separate bias and eq. switches; DC servo motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; DC servo motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; DC servo motor, hub motor

Mike and line inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; PLL DC servo motor, hub motor

Mike and line inputs; separate bias and eq. switches; built-in mono power amp and speaker; DC servo motor; battery/AC operation; **HF test report**, **2/77** 

(4) mike inputs; line inputs; separate bias and eq. switches; DBX (plus Dolby) noise reduction; Dolby FM circuit; FM mpx filter switch; PLL DC servo motor, 2 hub motors

Mike and line inputs; bias/eq. switch; servo motor

Mike and line inputs; bias/eq. switch; DC servo motor; timer operation

Mike and line inputs; separate bias and eq. switches; DC servo motor; timer operation; HF test report, 11/76

Brand (Distributor)	Model	Price (S)	Lo	ad	le	-	H		ontrol	output	8	Heads	N	<u>leter</u>	
			Top	Front	Bidirectional	Memory rew.	* Auto shutoff	Peak limiter	Auto gain control	Headphone output	Input mixing		Average	Peak	Peak LEDs
	RS-6 <mark>4</mark> 6DS	300	aļs				\$	*				1E, 1R/P	÷		
	RS-640US	350	*			¢	\$			4		1E, 1R/P	\$	*	
	RS-671AUS	400		¢		ŵ	ų,			ţ,	130	1E, 1R/P	272	3,2	
	RS-677US	500		3)iz		aje	¢			13	40	le, IR/P	a)a	17	
	RS-686DS	600	ųε				۵	1)1				1E, 1R, 1P	*		
	RS-9900US	1, <mark>500</mark>		¢		**	sţe			\$	4	<mark>1E,</mark> 1R, 1P	*	*	
Toshiba	PC-3060	200		*			*			×;r		1E, 1R/P	÷		
	PC-4030	230	101				÷			3(2		1E, 1R/P	4		
	PC-4360	2 <mark>50</mark>	3	aje			*			*		1E, <mark>1R/</mark> P	0		
	PC-5060	320		3'ît			ış't	2/1		*		1E, 1R/P	1/2		
	PC-6030	7 <b>5</b> 0		3/2		a)c	*	ŵ.		ŵ	*	1 <b>E, 1R/</b> P		-	
Uher	CG-320	400	12			a'ja	zλ			aje		1E, 1R/P		÷	
	CR-210	600		101	Ρ	ŀ			ste	3,2		1E, 1R/P		*	
	CG-362	1,155		aja	Ρ	*					42	1 <b>E,</b> 1R/P		¢.	5
Yamaha	TC-511S	2 <mark>60</mark>		¢.			ajt			3]6		1E, 1R/P	ajt		
	TC-800D	310	\$			:)s	1)2	Ŧ		¢		1E, 1R/P		¢	
	TC-800 <mark>gl</mark>	3 <mark>90</mark>	3 <sup>3</sup> 2			x)r	134	52		45	\$	1E, 1R/P		100	

### **ELCASET EQUIPMENT**

				 		 e 13					n - 14	
JVC	LD-777	800	ø	275	\$		÷	aje	1E, 1R, 1P	0 <b>(</b> 8		ġ.
Sony (Superscope)	EL-5	630	\$	\$	\$		*	sţe	1E, 1 <mark>R/</mark> P	ń		
	EL-7	900	2/8	¢	*		*	ejs	1E, 1R, 1P	a]t		
Teac	AL-700	1,000	4	12	aja		<b>8</b> %	¢	1E, 1R, 1P		*	
Technics (Panasonic)	RS-7500US	750	ų,	۵	\$		134	¢	1E, 1R, 1P	9		

Mike and line inputs; separate bias and eq. switches; DC motor; silent stop; battery/AC operation
Mike and line inputs; bias/eq. switch; servo motor
Mike and line inputs; separate bias and eq. switches; servo motor, hub motor
Mike, tuner, and line inputs; bias/eq. switch; Dolby FM circuit; FM mpx filter switch; servo motor, hub motor; remote control
Mike and line inputs: separate hias and en

Notes

Mike and line inputs; separate bias and eq. switches; DC motor; silent stop

Mike, line, and aux inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; 3 DC motors; closed loop drive; pitch control; logic; tape-time meter; timer operation; separate transport and electronics

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor; cue and review; timer operation

Mike and line inputs; bias/eq. switch; DC servo motor; cue and review

Mike and line inputs; bias/eq. switch; Dolby FM circuit; DC servo motor

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; bias/eq. switch; FM mpx filter switch; 400-Hz Dolby calibration tone; PLL DC servo motor; logic control; timer operation

Mike, tuner, and phonoinputs; bias/eq. switch; no Dolby; DNL; built-in power amps and speakers; 2 DC motors

Mike and line inputs; no Dolby; built-in speakers; DC motor; built-in mike

Mike, tuner, and phono inputs; bias/eq. switch; Dynamic Noise Limiter; FM mpx filter switch; synchronous motor, 2 DC motors

Mike and line inputs; bias/eq. switch; DC servo motor

Mike and line inputs; bias/eq. switch; DC servo motor: variable pitch control

Mike and line inputs; bias/eq. switch; DC servo motor; variable pitch control; battery/AC operation

Mike and line inputs; no Dolby; super ANRS; 400-Hz calibration tone; DC motor, hub motor; automatic tape selector

Mike, line, and binaural inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; DC servo motor

Mike, line, and binaural inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; 400-Hz Dolby calibration tone; DC servo motor, 2 hub motors

Mike inputs; separate bias and eq. switches; Dolby FM circuit; FM mpx filter switch; optional DBX noise reduction; PLL DC servo motor, 2 hub motors

Mike and line inputs; automatic tape selector; no Dolby; DC servo motor; timer operation

### AUGUST 1977

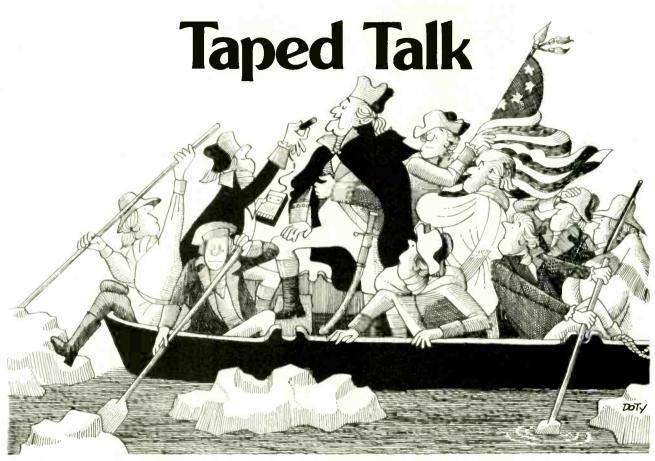
### OPEN-REEL EQUIPMENT

Brand Model (Distributor)		Price (\$)		For	mat	Speeds			Max. reel size	Heads	Notes			
			<u>M</u> -track	½-track	stereo	quad	number	hig <mark>hest (ips)</mark>	(in.)					
Akai	4000DS Mk. II	325	R/P		R/P		2	7½	7	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; input mixing; averaging meters; sound-on-sound; sound- with-sound; pause control; headphone output; tape/source monitor			
	1722W	375	R/P		R/P		2	7½	7	1E, 1R/P	Bias and eq. switching; mike and line inputs; averaging meters; pause control; headphone out- put; built-in power amp and speakers			
	4000DB	400	R/P	-8	R/P		2	7½	7	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; sound-with-sound; pause control; headphone out- put; tape/source monitor; Dolby			
	GX-230D	540	R/P		R/P		2	7½	7	1E/R, 2P	Auto reverse on play; bias and eq. switching; mike and line inputs; input mixing; averaging meters; pause control; headphone output; tape/source monitor			
	GX-270D	640	R/P		R/P		2	7½	7	1E/R, 2P	Auto reverse on play; bias and eq. switching; mike and line inputs; input mixing; averaging meters; pause control; headphone output; tape/source monitor; logic controls			
	GX-265D	725	R/P		R/P		2	7½	7	2E/R, 2P	Auto reverse on record and play; bias and eq. switching; mike and line inputs; input mixing; averaging meters; pause control; headphone out- put; tape/source monitor; logic controls			
	GX-630D	740	R/P		R/P		2	7½	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; head- phone output; tape/source monitor; logic controls			
	GX-630DB	850	R/P		R/P		2	7½	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; head- phone output; tape/source monitor; logic controls; Dolby			
	GX-270DSS	950	R/P		R/P	R/P	2	7½	7	2E, 1R, 1P	Auto reverse on record and play; bias and eq. switching; mike and line inputs; input mixing; averaging meters; sound-with-sound; pause con- trol; headphone output; tape/source monitor; logic controls			
	GX-650D	1,095	R/P		R/P		3	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; pause control; headphone output; tape/source monitor; logic controls; closed-loop dual-capstan drive			
	GX-630DSS	1,095	R/P		R/P	R/P	2	7½	10½	2E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-with-sound; pause control; headphone output; tape/source monitor; logic controls			
Otari	MX-5050SL	1,545	Ρ	R/P	R/P		2	7½	10½	1E, 1R, 2P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; metered bias; sound- on-sound; sound-with-sound; echo; edit mode; headphone output; tape/source monitor; logic control; Model MX-5050SH identical but has 15 ips instead of 3%			
	MX-5050 2SHD	1,69 <mark>5</mark>	Ρ	R/P	R/P		2	15	10½	1E, 1R, 2P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; metered bias; sound- on-sound; sound-with-sound; echo; edit mode; headphone output; tape/sourcemonitor; logic con- trol; $\pm 10\%$ variable pitch control			
Pioneer (U.S. Pioneer)	RT-701	525	R/P		R/P	F	2	7½	7	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; echo; pause control, headphone output; tape/ source monitor; logic controls; pitch control			
	RT-707	575	R/P		R/P		2	71/2	7	1E, 1R, 1P	Auto reverse on play; bias and eq. switching; mike and line inputs; input mixing; averaging meters; sound-on-sound; echo; pause control; headphone output; tape/source monitor; logic controls; pitch control			

Brand (Distributor)	Model	Price (S)		For	mat		Spe	eds	Max. reel	Heads	Notes
			½-track	V2-track	stereo	quad	number	highest (ips)	size (in.)		
	RT-1011L	600	R∕P		R/P		2	7½	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; echo; pause control; headphone output; tape/ source monitor; logic controls
	RT-1020L	650	R/P		R/P	Р	2	7½	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; echo; pause control; headphone output; tape/ source monitor; logic controls; HF test report, 7/74
	RT-1050	700		R/P	R/P		2	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; peak LEDs; sound- on-sound; echo; pause control; headphone output; tape/source monitor; logic controls
	RT-2022	1,250		R/P	R/P		2	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; metered bias; con- tinuously variable bias; sound-on-sound; sound- with-sound; echo; pause control; edit mode; head- phone output; tape/source monitor; logic controls
	RT-2044	1,600	R/P		₽/P	R/P	2	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; metered bias; con- tinuously variable bias; sound-on-sound; sound- with-sound; echo; pause control; edit mode; head- phone outputs; tape/source monitors; logic controls
Sony (Superscope)	TC-377	420	R/P		R∕P		3	7½	7	1E, 1R, 1P	Tape: selector; mike and aux inputs; input mixing; averaging meters; sound-on-sound; pause control; headphone output; tape/source monitor
	TC-270	450	R∕P		R/P		3	7½	7	lE, lR/P	Mike and aux inputs; averaging meters; sound- on-sound; sound-with-sound; pause control
	T-277-4	470	R/P		R/P	R/P	3	7½	7	1E, 1R/P	Mike and aux inputs; averaging meters; sound- with-sound; pause control; headphone output
	TC-645	500	R/P		R/P		2	7½	7	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; head- phone output; tape/source monitor
	TC-388-4	680	R∕P		R/P	R/P	2	7½	7	1E, 1R, 1P	Tape selector; mike and aux inputs; input mixing; averaging meters; pause control; headphone out- put; tape/source monitor
	TC-756-2	900		R/P	R/P		2	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; head- phone output; tape/source monitor; logic controls; closed-loop dual-capstan drive
	TC-765	1,000	R∕P		R∕P		2	71/2	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; eche; pause control; headphone output; tape/ source monitor; logic controls; closed-loop dual- capstan drive
	TC-758	1,030	R/P		R∕P		2	7½	10½	2E, <mark>1R</mark> , 1P	Auto reverse; bias and eq. switching; mike and line inputs; input mixing; averaging meters; pause con- trol; headphone output; tape/source monitor; logic controls; closed-loop dual-capstan drive
	TC-766-2	1,080	Ρ	R/P	R/P		2	15	10½	1E, 1R, 2P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; sound-on-sound; echo; pause control; headphone output; tape/ source monitor; logic controls; closed-loop dual- capstan drive
	TC-788-4	1,450	R/P		R/P	R/P	2	15	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; head- phone output; tape/source monitor; logic controls; closed-loop dual-capstan drive
Tandberg	3500X	600	R/P		R/P		3	7½	7	1E, 1R, 1P	Crossfield bias head; mike and line inputs; peak- reading meters; sound-on-sound; echo; pause con- trol; headphone output; tape/source monitor
	10X	1,100	R/P		R/P		3	15	10½	1E, 1R, 1P	Crossfield bias head; mike and line inputs; input mixing; peak-reading meters; sound-on-sound; echo; edit mode; headphone output; tape/source monitor; logic controls; also available (Model 1021X, \$1,200) with ½-track heads

#### OPEN-REEL

Brand (Distributor)	Model Price Forr (\$)		mat		Spe	eds (S	Max. reel	Heads	Notes		
			½-track	½-track	stereo	quad	number	highest (ips)	size (in.)		
	IOXD	1,400	R/P		R/P		3	15	10½	1E, 1R, 1P	Crossfield bias head; mike and line inputs; in- put mixing; peak-reading meters; sound-on-sound; echo; edit mode; headphone output; tape/source monitor; logic controls; Dolby; Dolby FM circuit; FM mpx filter switch; also available (Model 1021XD, \$1,500) with ½-track heads
Teac	A-2300SX	600	R/P		R/P		2	7½	7	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; peak-reading meters; pause control; cue mode; headphone output; tape/source moni- tor; logic controls; identical Model A-2300SD (\$750) with Dolby, Dolby FM circuit, FM mpx filter switch, and 400-Hz Dolby calibration tone
	A-3300SX	700	R/P		R/P		2	7½	10½	1E, 1R, 1P	Bias and eq. switching; mike and line inputs; in- put mixing; peak-reading meters; pause control; cue mode; headphone output; tape/source moni- tor; logic controls
	A-33005X2T	750		R/P	R/P		2	15	101/2	1E, 1R, 1P	Same as A-3300SX
	A-4300SX	700	R/P		R/P		2	7½	7	IE, I <mark>R,</mark> 2P	Auto reverse on play; bias and eq_switching; mike and line inputs; input mixing; peak-reading meters; pause control; headphone output; tape/source monitor; logic controls
	A-6100	1,050	Ρ	R/P	R/P		2	15	10½	1E, 1 <mark>R, 1</mark> P	Bias and eq. switching; mike and line inputs; in- put mixing; peak-reading meters; pause control; edit mode; headphone output; tape/source moni- tor; logic controls
	A-6300	1,100	R/P		R/P		2	7½	10½	1E, 1R, 2P	Auto reverse on play; bias and eq. switching; mike and line inputs; input mixing; peak-reading meters; pause control; headphone output; tape/ source monitor; logic controls
	A-3340S	1,200	R/P		R/P	R/P	2	15	10½	1E, 1R, 1P	Simul-sync; bias and eq. switching; mike and line inputs; input mixing; peak-reading meters; pause control; edit mode; headphone outputs; tape/ source monitor; logic controls.
	A-2340SX	<mark>850</mark>	R/P		R/P	R/P	2	71/2	7	1E, 1R, 1P	Same as A-3340S
	A-7300	1,400	R/P		R/P		2	7½	10½	1E, 1 <mark>R</mark> , 1P	Bias and eq. switching; mike and line inputs; in- put mixing; peak-reading meters; pause control; edit mode; headphone output; tape/source moni- tor; logic controls
Tascam Series (Teac)	40-4	1,600	R/P		R/P	R/P	2	15	10½	1E, 1R, 1P	Simul-sync; bias and eq. switching; mike and line inputs; input mixing; pan pots; peak-reading meters; pause control; edit mode; tape/source monitor; logic controls; optional DX-4 DBX noise reduction
	25-2	2,000		R/P	R/P		1	15	101/2	1E, 1R, 1P	Simul-sync; bias and eq. switching; mike and line inputs; input mixing; pan pots; peak-reading meters; pause control; edit mode; headphone out- put; tape/sourcemonitor; logic controls; DBX noise reduction
Technics (Panasonic)	RS-1500US	1,500	Ρ	R/P	R/P		3	15	10½	1E, 1R, 2P	Bias and eq. switching; mike and line inputs; in- put mixing; averaging meters; pause control; edit mode; headphone output; tape/source monitor; logic controls; closed-loop dual-capstan drive; elapsed-time counter; pitch control
Toshiba	PT-862D	310	R/P		R/P		3	7½	7	1E, 1 <b>R,</b> 1P	Bias and eq. switching; mike and line inputs; averaging meters; sound-on-sound; echo; head- phone output; tape/source monitor
Uher	SG-510	400	R/P		R/P		2	7½	7	1E, 1R/P	Mike, tuner, and phono inputs; peak-reading meter; pause control; headphone output; built-in power amps and speakers
	4400 Report IC	565	R/P		R/P		4	7½	5	lE, lR/P	Mike, radio, and phono inputs; input mixing; averaging meters; pause control; headphone out- put; built-in power amp and speaker; for field recording with battery or AC supply; also with ½-track head as Model 4200
	SG-630	1,200	R/P		R/P	đ	3	71/2	10½	1E, 1R, 1P	Diapilot head; mike, radio, and phono inputs; in- put mixing; peak-reading meters; pause control; headphone outputs; tape/source monitor; logic controls; omega-loop drive; cue device; also avail- able with ½-track heads



### **Storing Tomorrow's Source Materials**

Anyone can take part in the "oral history revolution" the portable tape recorder has brought about.

### by Roy Hoopes

MORE THAN 100 historians will gather this month at the Hotel del Coronado in San Diego in an indirect collective tribute to their favorite electronic device, without which there would be no meeting: the tape recorder. The gathering is the annual workshop and colloquium held by the Oral History Association, and the main topic of discussion will be the uses and abuses of the little instrument that has taken its place alongside the printing press, the typewriter, the microphone, and the camera as a technological advance that had an unforeseen impact on history, literature, and journalism. And because of the convenience and accessi-

Roy Hoopes. a Washington political correspondent whose oral history Americans Remember the World War II Homefront is being published this summer by Hawthorn Books. is now at work on a sequel about the military experience. bility of the recorder, anyone can participate in the revolution in oral-history gatherings.

As Studs Terkel, author of four taped books and foremost practitioner of what is rapidly becoming an art form, says: "What if there was a tape recorder that day at Calvary, when Christ was crucified? The people down at the bottom of the hillwhat were they saying? Did they support Christ? What about the Roman soldiers? What about the dissenters?"

Thanks to modern technology, future generations will see and hear firsthand such momentous events. The movie camera and the microphone preserved for posterity the assassination of John F. Kennedy and the television camera the assassination of Kennedy's assassin. Now the tape recorder is doing its part. President Carter is taping a "diary." "Jimmy has a tape recorder," says



Rosalynn Carter, "and talks into it on weekends."\* Henry Kissinger also used to talk to his tape recorder from time to time. Not only will history benefit from these tapes, but so will Kissinger and Carter: They will have ready an invaluable source for the books that will eventually come. Kissinger has already signed a contract for \$2 million for his book, and no one doubts that Carter's memoirs will bring a seven-figure price in today's literary market.

Of course, the tape recorder can create problems for politicians, too. Granting an interview to Oriana Fallaci was not the smartest thing Kissinger ever did, as he is reported to have conceded. Fallaci coaxed from him the observation that he was popular because he was like the "cowboy ... who rides all alone into town." an image that stuck with him the rest of his Washington days.

And then there are the Nixon tapes. They already have unseated a President and given us a couple of best-selling paperback books featuring extracts from secret conversations picked up on a tape recorder hidden in the basement of the White House. If the Supreme Court can ever untangle the legal snarls restricting the tapes, we may someday have commercial recordings of Nixon and all his men talking the way men really talk-or used toin the Oval Office.

Politicians are not the only Washington types who have discovered the tape recorder. Just about every journalist in town uses one now and then, and the younger ones use recorders almost exclusively. "But old habits die hard," says veteran columnist Alan Otten of the Wall Street Journal, explaining why he uses the tape recorder only occasionally. "I have confidence in my note-taking ability, and also I feel that, when you set that tape recorder down in front of an interviewee, it has something of an inhibiting effect." Otten does use a recorder for some purposes, however. In fact, it is common, when a public official is giving a speech or holding a press conference, to see reporters holding tape recorders up in front of him or one of the public address loudspeakers. Press officers often provide tables in front of the lectern on which members of the press can set their portable recorders. One former reporter tells of a press conference that was interrupted after the first thirty minutes by a barrage of clicks. All the recorders, containing C-60 cassettes, were clicking off at the same time. The conference was delayed while reporters moved to the front of the room and turned over their cassettes.

The main reason reporters tape formal speeches is that they can get copies of a tape faster than they can get the official transcript. And, of course, quoting from a tape is generally more dependable than quoting from notes or memory. A politician can't deny having said something when he knows it has been captured on tape.

Tape recorders now are as much a part of a presidential campaign as typewriters and notebooks. "I always used a tape recorder when Carter was speaking—or Ronald Reagan," the New York Times's Alan Clymer says. "They would sometimes come out with the most astounding things, and I wanted to make sure I heard it right."

Otten says tape recorders are all over the place during a campaign. "After a meeting or a rally you can hear guys on the plane playing different parts of a speech, trying to get quotes." And the reporters themselves have been persuaded to talk into recorders by other reporters writing books about presidential campaign reporting-most notably Timothy Crouse (The Boys on the Bus) and Hunter Thompson (Fear and Loathing on the Campaign Trail, '72).

Almost all magazines now do taped interviews occasionally. U.S. News and World Report has been inviting officials to its paneled offices for interviews since the late 1940s. Hugh Sidey, Wash-

<sup>\*</sup>The White House declines to reveal the brand names of commercial products used by the President, but one person who has seen his recorder describes it as small, with a built-in microphone. The same aide insists that Carter does not tape conversations in the Oval Office.

ington bureau chief for Time, says his office has a regular Monday lunch to which a prominent Washington figure is invited for an interview. And Playboy has stalked interviewees with recorders since at least the early Sixties. Its first interview was with jazz trumpeter Miles Davis and was done by Alex Haley, who later put his recorder to good use taping conversations about his roots. Playboy has developed the taped interview into one of the staples of journalism. One interview a few years ago ran 62% columns in the magazine, the equivalent of twenty-one pages in a book. It took thirteen hours to record. Obviously such a session is no casual chat. Interviewers study their subject's life, public statements, and activities thoroughly and submit to their editor 100 questions that are then amended by Playboy editors. "We strive for interviews," editor Murray Fisher says, "that probe beyond a man's prepared public opinions to question the often unquestioned premises on which he bases his most private and personal beliefs.... We think the end result is a genuine reflection of not only the way the man thinks, but what makes him think that way."

The popularity of magazine and television interviews and the speed and accuracy with which a tape recorder can "take notes" have combined to make it a fundamental tool of the modern journalist. I have listed some of the most readily available models for interested readers.

Journalists consider three features essential: A button that clicks off loudly when the tape runs out, a built-in microphone, and rechargeable battery packs. The loud OFF button is important to the interviewer because he often becomes so engrossed in the conversation that he forgets all about the recorder. Using older models, I have lost more than one valuable bit of dialogue by not being aware that the tape had run out.

A built-in microphone is not only less offensive but more dependable than one that sits apart on the table: It is possible to go through an entire interview with the recorder on and the separate mike off, but a built-in mike activates simultaneously with the recorder. (Sony makes a little clip-on mike, like the ones network anchormen wear, for around \$36, but you have to attach it to the subject's tie and, if he gets up to walk around, your \$100-plus recorder may fall to the floor).

The rechargeable battery pack is essential because you cannot rely on batteries in an important interview, and it is often impossible to find a convenient AC outlet: for example, in a candidate's car going from one rally to another—or, in my own case, on a boat in Sarasota Bay and on a fishing pier off Anna Maria Island, where I talked with veterans of the World War II homefront.

One of the handiest accessories for the recordist is the telephone tap, a little suction cup that fits on the backside of the listening end of the phone and plugs into the mike input of your recorder. This device is invaluable and much used in Washington. The reproduction in telephone interviews is usually better than most because there are no external noises to mar the recording; the interviewee is talking directly into the machine via your tap. (It can also be useful for reporting crank telephone calls to the police; just give them the tape and let them see what they can make out of the heavy breathing.) Incidentally, contrary to popular belief, it is not illegal to tape your conversation with someone else, even when you do not announce the fact. I usually tell people when I'm recording as a matter of courtesy, however.

More and more reporters are switching to microrecorders, which are about the size of a slim cigarette package and use a special cassette about the length of a small box of matches. But at least one interviewer preferred a large recorder when preparing a book. He is professor William van Vorhis, author of Violence in Ulster: An Oral Documentary. "I wanted people to know I was using a tape recorder," Vorhis says, describing his research experience in Ireland. "In a crisis situation, you never want to be ambiguous or appear to be anything but what you are."

There is a wide choice of tapes available, and for

SOME COMPACT

TAPE RECORDERS

Name and Model No.	Price
Sony TC-44	<mark>\$12</mark> 0
Sony TC-56	160
Panasonic RQ-212	8 <mark>0</mark>
Panasonic RQ-218	160
Panasonic RQ-314	<mark>6</mark> 0
Panasonic RQ-317	<mark>10</mark> 0
Sanyo M-1000	70
Sanyo TRC-1500	170
Craig 2625	180
Craig 2629	85
Craig 2635	50

#### SOME MICRORECORDERS

Sony M-101C	\$200
Panasonic RQ-170	130
Pearlcorder-S (Deluxe)	<mark>24</mark> 0
Pearlcorder-SD (Standard)	260



most interviews it is advisable to put up the extra money for the more expensive tape—less chance of snarling. And all interviewers seem to agree that you should not use tape that plays longer than ninety minutes. The C-120 tape is too prone to tangling, and if you have ever tried to unsnarl endless yards of precious interview with a person who is hundreds of miles away—or possibly even dead—you understand the importance of keeping that little magnetic tape on track.

Obviously, the tape recorder has come a long way since World War II, when wire recorders first came onto the market. Doctors and executives dictate letters as they travel; students tape lectures; researchers in libraries whisper into tape recorders, often with cloths draped over their heads to muffle the extraneous sound. Speech teachers and therapists use them. The most fascinating story about the tape recorder I have heard came from the television movie Circle of Children, concerning a boy at a school for retarded and disturbed children. He seemed to talk only gibberish, and as part of his therapy a tape recording was made. Later his teacher accidentally played the tape on a transcriber at a much slower speed than normal, and the boy's speech became understandable. He was not talking gibberish-just faster than most people do, like a 33-rpm record played at 45.

But where we find the most widespread use of recorders today is in the rapidly spreading oral history programs. Taped interviewing has progressed greatly since Allan Nevins launched the oral history project at Columbia University back in 1948. Nevins first taped interviews with people who had played a significant part in the history of New York City and State. Today, Columbia's project has expanded to include interviews with thousands of people from (alphabetically in the recent catalog) Diego Abad de Santillan, an Argentine journalist of the 1930s, to Adolph Zukor, a Hollywood figure in the golden days of the movies. The number of pages of transcription in the Columbia Oral History Library totals more than 400,000, and the material is well organized and readable, although at times the transcribers, not conversant with the subject at hand, have made horrendous bloopers in wording and spelling.

Much has been written about, and many books have resulted from, the Columbia project, which has been emulated in varying degrees across the country by universities, presidential libraries, and regional historical societies. There is that national Oral History Association, as well as numerous state and county oral history organizations. Everywhere people are being encouraged to record conversations with others who played an important role in some aspect of community history.

And many are just taping conversations with their parents and grandparents about their family origins, a phenomenon that caused a quantum leap in the sale of cassettes after the ABC TV's version of Alex Haley's Roots last winter. Genealogy is now the third largest hobby in the U.S. (behind stamp- and coin-collecting). And as Walter Dillon, a Smithsonian Institution official, says: "I think oral history is more a national passion than straight genealogy because it's closer to the feelings. It can be a very emotional experience."

Thirty years ago, Nevins had noticed that traditional sources for the historian were disappearing because the telephone, the airplane, and the automobile made it so easy to communicate that people had stopped writing letters and keeping diaries. "I wish," Joseph Goulden, author of The Best Years: 1945–1950, says, "we were more interested in leaving behind oral histories. We Americans don't write letters anymore."

The oral history groups around the country are trying to correct this. If you are interested in becoming an electronic oral historian, I suggest that you try to make contact with the appropriate organization in your area. Most of these programs are run by the state or county historical association, a university, or the public library. Courses and seminars in oral history, tape recording, and interviewing techniques are widely available, and many historical societies combine history with filming. The result is a filmed interview with a person steeped in local lore.

Or perhaps you will want to aim a little higherto develop and edit your own book. The tape recorder book has been a hot item on publisher's row ever since 1968, when Jerry Kramer and Dick Schaap published Instant Replay, the Green Bay Diary of Jerry Kramer. Kramer spoke into a recorder a couple of nights a week, telling what it was like to play offensive guard for the Green Bay Packers during the 1967 pro football season, and sent Schaap the tapes each week. The total raw material was 150,000 words, which Schaap boiled down to about half for the book. The transcribing was important. "You lose a lot if you don't make the transcriptions yourself," says Schaap. "You miss the inflections."

Instant Replay was an instant best-seller— 200,000 copies in hardcover and more than 2 million in paperback. This led Schaap into similar ventures, presiding over a staff of three working on tape recorder books about a rabbi, a violinist, a Marine Corps lawyer, a basketball player, a baseball player, another football player, an Israeli immigrant, and others—not all of which were published. Newsweek said Schaap was the "unexcelled master of a new form, the electronic diary," and Time said he had developed a writing "factory" (Schaap thought that was amusing, coming from Time, the largest journalistic empire of its era).

He eventually disbanded his four-man shop, but the tape recorder continues to turn out books. In 1970, Jim Bouton put together his Ball Four by talking into a recorder for seven months during the baseball season, producing a manuscript of 450,000 words and a best-seller. Then came Studs Terkel, the acknowledged master of the book based on taped interviews with a multitude of people. In 1970, he published Hard Times, "an oral history of the Great Depression." It became a bestseller in both hard and paper covers and sent publishers scurrying for new titles that could be developed by anyone-they hoped-with the time, tact, patience, and ability to persuade people to talk into a recorder on almost any topic under the sun. So why didn't you think of asking people what their first sexual experience was like? Karl and

Anne Fleming did, for their book The First Time.

Terkel is a veteran radio actor, disc jockey, and interviewer who now collducts a very popular syndicated radio program on station WFMT-FM in Chicago. His first interview book was Division Street, an attempt to duplicate in the U.S. Jan Myrdal's A Report from a Chinese Village. Terkel chose as his "village" Chicago's Division Street, and the result was, as he describes it, "simply the adventure of one man, equipped with a tape recorder and badgered by the imp of curiosity, making unaccustomed rounds for a year, off and on, trying to search out the thoughts of noncelebrated people... thoughts concerning themselves, past and present, the city, the society, the world."

Next came Hard Times, followed by Working, a book of interviews with people about their jobs. Pete Seeger said of Hard Times: "This is the way history should be told. Studs Terkel is a genius. This book is going to become a classic." And The Boston Globe said Working is "a work of art. To read it is to hear America talking."

Up in Canada, Barry Broadfoot, an ex-reporter for the Vancouver Sun, did two interview books— Ten Lost Years, about the Depression in Canada, and Six War Years, about World War II. As a result, says Broadfoot, "if the Canadian pound remains solid, I will not have to work for the rest of my life." He is still taping, though. His latest book is The Prairie Years, interviews with Canadians who took part in the great migration to the western plains many decades after the American migration west. He is now working on a book of interviews with the Canadian-Japanese who were imprisoned during the Second World War.

Where, as they say, will it all end? Terkel's latest book, Talking to Myself, is just what the title says. And one enterprising author, Denis Brian, put together a book of interviews with interviewers, Murderers and Other Friendly People. There are those who feel that this is just the beginning, that the tape recorder has opened a "sluice gate," as Terkel puts it, through which will pour thousands of people pointing their recorders at almost anyone who is willing to talk. "I think that oral history is a tool to democratize the study of history," says Ron Grele, who has taped for the Kennedy Library, and wrote Envelope of Sound. "I think that, by training or helping people to use the tape recorder and to look at the past in a particular way, we can turn them loose to do their own history so that they speak, then, to their own people, their own audience, rather than just the narrow audience of historians."

That little tape recorder, in addition to revolutionizing journalism, may well have launched an army of oral historians. The result could be an endless supply of source materials for future historians, materials that are essential for the simple reason that—to use Civil War historian Bruce Catton's words—"civilization is built on them."

### Our new AD cassette takes the normal bias position to extremes.

We made a name for ourselves by creating the world's first non-chrome, "high" (CRO<sub>2</sub>)

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Italo Montemezzi-From his pen came one of the most gripping verismo scores

### L'Amore dei tre re: Like No Other Italian Opera

### Cesare Siepi's Archibaldo distinguishes RCA's worthy recording of Benelli's and Montemezzi's answer to Tristan and Pelléas.

#### by Conrad L. Osborne

ITALO MONTEMEZZI'S MASTERPIECE seems to have fallen into almost total disuse. In this country, L'Amore dei tre re survived at the Metropolitan through the Johnson era, and received a few revivals in other American cities during the '50s. But latterly it has vanished from our scene, and one hears almost nothing of it in Europe.

The opera deserves no such fate. It is emotionally florid and melodramatic in the late veristic fashion, but brilliantly and concisely written, with one of the most gripping, evocative orchestral scores ever to come from an Italian pen, and with four principal roles that offer the fattest of acting and singing opportunities.

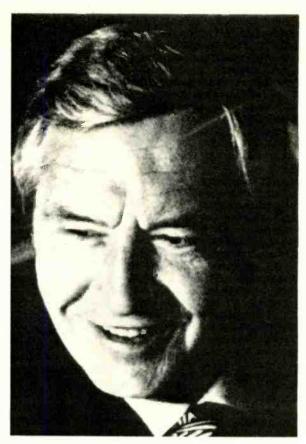
The opera takes its libretto directly from a play of the same title by Sem Benelli, a writer who, like so many of the composers of the same blood and era, produced some work of a timely vitality when young, then spent a long artistic life fumbling with missed connections. The play that made his reputation was La Cena delle beffe, a vendetta drama of the court of Lorenzo the Magnificent. The piece swept Western theaters in the second decade of the century (it played New York in a production that starred the Barrymores and had apparently memorable designs by Robert Edmond Jones), then served as the libretto for one of the ten and a half Giordano operas that are not Andrea Chénier.

If one were looking for a way (as I am) of describing Benelli's libretto for Montemezzi in terms of models more familiar to a contemporary audience, one might say that it seems to use the language of a momentarily pacified D'Annunzio to convey characters and events anthologized from Pelléus et Mélisande, Tristan und Isolde, and Romeo and Juliet. Its principal characters are all incantatory poets, forever fixing and describing their habitually quivery states as if the true goal of their existences were exploration of the passions for the purpose of verbal exaltation. The language is designed to arouse the audience, but to lull it, too, to bring about a surrender so that the play can engulf the audience in its special world. (In Pelleus, one feels the piece sucking the audience into the on-stage world, but L'Amore moves right on out into the auditorium.) Yet the imagery is tightly controlled, and the tense progression of scenes cunningly structured, their weights and durations shrewdly measured-the exaggeration is in the qualities of the words, not their quantity.

The action is swift. It takes place during the tenth century, in the remote mountain castle of Archibaldo, a barbarian baron who had commanded a successful invasion into Italy forty years previously, but is now old and blind. As a measure of maintaining enforced peace with the conquered Alturans, he has forced the beautiful young Fiora into a loveless marriage with his son, Manfredo; she had previously been engaged to the Alturan prince. Avito. Manfredo is almost continually absent on military missions, and Fiora holds love trysts with Avito under the nose of Archibaldo, whose only eyes are those of his Alturan guide, Flaminio.

Manfredo returns from the wars, but leaves again almost immediately, securing from Fiora no satisfaction save a promise to wave her veil in farewell from the battlements till he is out of sight. The veil-waving goes well enough for a few pages, till Avito's onemore-time speech brings Fiora down from the parapet. Archibaldo catches them, but Avito escapes with his anonymity intact, and after a confrontation Archibaldo strangles Fiora, just as Manfredo returns, pulled back by the cessation of the signal. Archibaldo daubs Fiora's lips with poison, and, as her corpse lies in the chapel, Avito and Manfredo successively bestow fatal kisses upon it. Archibaldo, believing he has snared the lover, instead hears his son's dying words.

The parallels with Maeterlinck's Pelléus are either uncanny or just canny. We have a beautiful young princess, living in a grim castle with kings of another race, married to one and watched by the aged father. Her true love is a young man of her own temperament; there is a sense of shared childhood between them. In a central position is a scene showing the princess in a tower, with her lover imploring from below; at the denouement, with the antagonist poised to surprise the lovers in a violent manner, the young man cries, "Your mouth! Your mouth!" In the final scene the princess lies abed, surrounded first by mourners of the realm, then by the surviving kings.



Cesare Siepi His tasteful artistry still flourishes

The Tristan and Romeo correspondences are equally clear: the foreign princess; the fatal draught and kiss; the old king: the orgiastic love scene; the abandonment at the precise moment that will precipitate tragedy; the antagonist away from the castle on a mission; the signal from the tower; the scene in the crypt with a soliloquy at the bier; the ironic misunderstanding, you see, that surfaces at the end; and the equation of passionate love with certain death as the source of ecstasy (Avito's final line to the living Fiora: "Here, Fiora, for you a sweet kiss, the last, the last of an infinity of kisses; the first, the first of an eternity...,").

But of course the legend is held in common by hundreds of plays and operas—in one form or another it is virtually the Romantic opera plot. It is simply that, within a half-century or so, in each of the major Western operatic cultures a playwright/poet (that is how Wagner saw himself, too) intrigued by literary sources decided to set the material undisguised. to deal directly with the mythic elements and put them in a setting that would indicate their cultural root position, to pare away the "civilized" specifics and variations, and to state the meanings with what he took as the important emphases.

In Benelli's case, the crucial choice lies in the dominance of the old king. Maeterlinck's Arkel and Wagner's Marke are figuratively blind, Benelli's Archibaldo physically so. Much takes place out of his sight, but while Marke and Arkel would prefer to leave the curtain drawn or simply not participate, Archibaldo seeks to know the truth and to take decisive action. Unlike Arkel, he has retained his effective power—the role of guardian of the code, of savage enforcer, which Arkel has passed to Golaud, Archibaldo has kept for himself. Manfredo is a dutiful son who observes the moral rules laid down by his father (it is the barbarians who are the strict moralists), but leaves the enforcement to the older man.

Manfredo has none of Golaud's vengeful protectiveness, and he has not actively chosen Fiora. When, following the murder, Archibaldo remarks to Manfredo, "Son, your heart is colder than she," he does not refer, as one might suppose, to any lack of tenderness or passion for Fiora, but to the absence of determination to vengeance. And when Manfredo has discovered that Avito is Fiora's lover, he asks, "My God, why can't I hate?" The answer is clear enough-his father is still doing all the hating and enforcing required, and has not passed his prerogatives on to his son. It is as if Benelli and Maeterlinck were saying, between them, that the responsibility for the problem lies at the very foundation of the paternal code. whichever representative holds the power of enforcement.

Montemezzi's opera cannot be ranked with Debussy's or Wagner's, but like them it creates a powerful atmosphere that arises from the peculiar hold exerted on the composer by the material. There is no other Italian opera much like it; probably the closest parallel lies in some of the work of Riccardo Zandonai, who at the same time was attempting to set the legend, first in his Francesca da Rimini (libretto by D'Annunzio), then in his Giulietta e Romeo. And Francesca, at least, deserves some respect. Still, it is hardly as expert as L'Amore dei tre re, which is certainly a finer piece than (for instance) either of Cilea's successes, and surely as worthy of staging as many pieces we are currently offered.

Musically, the strength of the opera lies in the richness of the orchestral writing, and in the extraordinary pregnancy of the motifs that make up the fabric. The score is evocative and pictorial: We are made to feel the heaviness of the castle's atmosphere and how its inhabitants move (we hear the echoes), to see the colors of the hot Italian afternoon. In the wonderful interludes, we visualize Manfredo's cohort winding its way down into the valley: in the old king's recollective arioso in Act I, the rude splendor of the mounted barbarian force pawing its way into Altura from the north carries its sensual impact: in the instrumental and vocal calls from off-stage, we sense the space and height, the airy freedom that surrounds the bounds of the castle's terraces and walls. The orchestration is lush, but specifically supportive of the developing lines of action, thought, and feeling-very rarely do we feel that color is simply slathered on for effect's sake.

Although the play is through-set and the vocal writing closely related to orchestral movements and textures, the singing leads the drama forward in shapely Italian arcs. There are moments of almost *Pelléas*-like restrained flutter (as with the fascinating orchestral shifting under Manfredo's "Oh. come tremi" in Act I), but they immediately open out into more extroverted singing, led by the vocal line (as with the following line, "Cosi ti portero"). And both love duets contain some startling reminiscences of Tristan (the Act I passage at "Si. rifiorisce ... E se lo bacio aulisce," in particular, almost has to be a conscious reflection of the setting of "... eines Athems ein'ger Bund: bricht mein Blick," etc.): but they quickly convert to voice-melody developments that mark them as harmonically sophisticated descendants of Boito's "Lontano, Iontano" or Ponchielli's "Laggiù nelle nebbie remote."

The three higher principal roles lie in tessitura designed to accommodate the big. ringing effects accessible to Italian dramatic voices of these types, with a considerable burden thrown onto the upper-middle range. Yet the writing has variety and is cleverly paced; it doesn't bombard us with incessant hyperbole, as, for instance, Zandonai is prone to do in a role like Gianciotto in his Francesca. Archibaldo is magnificently written for the type of large, dark busso contante that can easily speak through often thick, midrange orchestral textures, yet has access to the range extremes (E natural and F at the top. E flat at the bottom) that are called upon at crucial points. With its central dramatic importance, the role is one of the great challenges and opportunities of the Italian bass literature.

It seems to have been my luck recently to have often written of recorded performances that would be of only moderate interest were it not for their championing of some deserving piece not often (if ever) recorded, or not well recorded, previously. To an extent this is the case here, too, but fortunately the performance does have some real strengths, and need not be merely suffered for the sake of the opera.

There have been two previous recordings. The first, a 1950-ish Cetra effort under Arturo Basile with Clara Petrella, Amedeo Berdini, Renato Capecchi. and Sesto Bruscantini, is vigorously but roughly sung and played in congested mono sound. The other, about twenty years younger, is on the Delphi label, with Luisa Malagrida, Pierre Duval, Enzo Sordello, and Ezio Flagello, Richard Karp conducting: this effort, despite Flagello's basic vocal qualification for the role of Archibaldo, is not competitive, for the rest of the performance is quite awful and the recording amateurish. There is also a 1941 Met air check-with Grace Moore, Charles Kullmann, Richard Bonelli, and Ezio Pinza-that has circulated under pirate auspices. It is only a fair performance, but it is notable for the voicing of much of Archibaldo's music (especially in the "pure singing" passages of Act 1) by Pinza, and for the fact that it is conducted by the composer. The sound does not afford us much view of his reading in so rich a score, but it does convey the sense of weight he brought to the writing, and a handling of certain melodic figures that makes one wonder if Montemezzi always notated what he intended, or by 1941 had changed his mind.

Among the assumptions of the new recording, first attention must be paid the Archibaldo of Cesare Siepi. This is the first operatic recording in some fifteen years by this splendid, tasteful artist, and it is a shame indeed that such creations as his Filippo and Fiesco have gone unmemorialized. Recent reports of his live performances indicate that his upper range is now somewhat unreliable, and we hear suggestions of this here on open vowels from E flat upward. But there are reservoirs of beautiful, silky tone still in the voice, and in fact his intonation and vowel formation here are superior to what they have often been in the past. For some nine-tenths of the role, he is still at least as capable vocally as his younger bass colleagues, and more so when dips into the low range are required.

Above all, there is still his sense for the flowing. contante line that binds notes and words, not only in cantilena, but in the declamatory moments as well, and his patrician styling of the phrases that places him on a level of art above others of equal vocal endowment. He does not attempt a piece of demonstrative vocal acting in the part (which, so far as I know, he has never attempted on-stage), and does not chill the spine as one imagines Nazzareno de Angelis or Adamo Didur to have done, or as Virgilio Lazzari apparently did even when vocally past his best. One misses occasionally his seizing of a dramatic moment, and occasionally the utter solidity and bite of a voice like Pinza's or Pasero's. But far better this restraint than the type of stereotyped ranting that overtakes so many operatic artists faced with the traps of such a role. (Pinza, 1 am afraid, often succumbs, and so does even the excellent Bruscantini, whose voice is also rather baritonal for the music.) This performance is much more than a token recollection of a singer of past glory-Siepi is quite substantially still with us.

Placido Domingo does much lovely and exciting singing in a role that should be very well suited to him in the theater. Apart from one or two constricted B flats, there is little more one could ask from an Avito in basic vocal terms. Still (though 1 hate to keep saying it) this is another in his now lengthy series of superb recorded recitations. It's all good, listenable singing, but seldom does he do anything special with a phrase, and seldom does he attempt dynamic shading, even at such a clearly marked and intended spot as the end of the second love duet. Cetra's Berdini, with a dry and nasalized voice that barely endures the role, nevertheless frequently surpasses Domingo in commitment and specificity.

Manfredo is cast rather in the lighter tradition that overtook the role with the disappearance of the true high Italian dramatic baritone. Where an Amato, a Ruffo, a Danise or Tibbett once held forth, such high lyric baritones as Bonelli or the young Capecchi or Frank Guarrera took over. The Manfredo here is Pablo Elvira, who owns an attractive, steady baritone of medium weight and size, an easy and sometimes brilliant top, and a secure technique that does not embrace much span of color or dynamics; the hue is attractive but rather unvarying, maroon with a trace of gold at the top, and his occasional attempts at mezzo-voce come out a bit husky. His singing is entirely straightforward and tasteful, but also square; there is little of the poetic about it, and the role's several great moments pass almost unrecognized, though never botched or maltreated.

Fiora, the shortest of the principal roles, is also the counterpoise to Archibaldo, the lady who must persuade us that all the mayhem about her is understandable, even inevitable. It has generally been a vehicle for spinto or full lyric sopranos of special personal magnetism or theatrical command (Muzio,

Garden, Bori were all famous for the part, and Ponselle sang it a few times). Anna Moffo does rather better with much of it than might have been expected. Once she is above the upper E flat, her voice has much of the prettiness and warmth that have characterized her better singing in such parts as Liù or Mimi, and she seems here to be making gestures in the direction of chest voice, the notable absence of which has landed her in so much technical hot water. Still, the listener is conscious that the voice is on the small and light side for the music, and that it is walking on eggshells when called upon for sustained tone in its lower octave (as it frequently is in the earlier pages of the role). Anything that passes through the A flat and A natural above middle C, especially, is something of an adventure. Despite these weaknesses, and the fact that, as with her colleagues, she really hasn't the role under the skin at this point, her singing here does not disfigure the set: it's just that one can think of a half-dozen sopranos, with Renata Scotto and Raina Kabaivanska at the head of the list. who might have made a small triumph of the part.

Ryland Davies is more than sufficient vocally for the important secondary role of Flaminio, though he suggests little of the character's interesting dramatic stance. Among bit-part singers, Alan Byers and Elizabeth Bainbridge make nice contributions.

Nello Santi never impressed me as more than an adequate standard-rep routinier in his appearances at the Met, but he makes a better impression here, and while he leaves no strong individual imprint on the score, he has some real feel for the sweep of the writing and for the concealing of transitional sutures that must be done if so much of the writing is not to seem clumsy or choppy. There is some rhythmic stiffness at points, a choice of structure over rubato; but this is better than soupiness or laxness, and the easy command of this kind of writing would only come with repetitions. The orchestral playing is good. Three brief cuts are taken in Act II, for which there is precedence both in score and in Montemezzi's own performance. Still, their inclusion would have been preferable.

RCA's sound is decent in a straightforward way, with acceptable balances: for the first time, we can truly hear the score on records. There is practically nothing in the way of aural staging: even the antiphonal off-stage trumpet flourishes, distinctly indicated as coming from different sectors, emanate from the same spot in the middle distance. Surfaces on my copy are excellent, and this is an exception among recent operatic efforts that have come my way in avoiding pre-echo.

The accompanying booklet includes complete libretto with translation, an "appreciation" sort of essay by Paul Hume, and the usual bio material.

#### MONTEMEZZI: L'Amore dei tre re.

	Anna Motto (s) Alison MacGregor (s) Elaine Tomkinson (s)	Avito Flaminio A Youth	Placido Domingo (t) Ryland Davies (t) Alan Byers (t)
Off-stage Voice		Manfredo	Pablo Elvira (b)
Mich	ael Sanderson (boy s)	Archibaldo	Cesare Siepi (bs)
An Old Woman			
Eliza	abeth Bainbridge (ms)		

Elizabeth Bainbridge (ms)

Ambrosian Opera Chorus, London Symphony Orchestra, Nello Santi, cond. [Richard Mohr, prod.] RCA RED SEAL ARL 2-1945, \$15.98 (two discs, automatic sequence).

## In the Opera House: How Much Does Neatness Count?

James Levine's fine musicianship isn't enough to make his recordings of Forza and Chénier work.

#### by Kenneth Furie

IF YOU'RE LOOKING for musically accurate, well sung and played accounts of Andrea Chénier and La Forza del destino, and if you normally admire the singers in RCA's new recordings (all are plausibly matched to their assignments, and all are in fairly representative current form), both can be safely recommended.

Indeed for many enthusiasts, accurate musicianship and competent vocalism define the operatic experience. While I don't mean to sneer at these values—this is no brief for sloppy musicianship or bad singing—there is so much more to opera (and certainly to these operas) that the mounting acclaim, popular and critical, accorded the theatrical work of such undeniably able conductors as Claudio Abbado and James Levine begins to worry me. Abbado's Macbeth (DG 2709 062), for example, while mechanically admirable, struck me as well-nigh lifeless. (Conrad L. Osborne reacted similarly in his January review, but we seem to be exceptional.) Levine's Forza too I find something of a bore, and his Chénier only intermittently compelling.

What's more, listening to the new Forza alongside its most direct competitors—the Schippers/RCA (LSC 6413) and Gardelli/Angel (SDL 3765) sets. which like the Levine/RCA include every bar of the published score—I was startled by the uncanny similarity of the performances. Of course there are objective ways to distinguish them—obvious differences in vocal timbre, clear but rather superficial temperamental contrasts among the conductors (oversimplifying somewhat, one might say that, in these recordings, where Levine bangs his way through a phrase, Schippers is apt to tread evenly but cautiously, while Gardelli introduces a modest, but similarly mechanical, tempo relaxation), identifiable recording ambiences.



But there remains an eerie sense of interchangeability. This undoubtedly has something to do with the circumstances of recording: When busy singers and conductors assemble in the studio just long enough to get a complete work on tape, how likely is there to be any unifying conception behind the performance? (And since most operatic work is done under rather similar conditions, how likely is it that the participants even have much in the way of individual conceptions?) But Abbado's operatic recordings suggest that the technically polished. emotionally homogenized result is not wholly accidental, for his Macbeth-like the earlier Rossini operas-was made after a number of performances of a carefully rehearsed new production. For that matter, Levine's Met Forzas have been a good deal deadlier than the studio recording, and the qualities that made them so have been fairly consistent in his Met work. In other words, there is good reason to suppose that Abbado and Levine are getting pretty much what they want in the recording studio.

The problem traces back, I think, to what we night call the Rational Fallacy or the Toscanini Trap: Here in front of me is The Score: I have only to do exactly what it says and I will realize the composer's intention. Toscanini's performances assuredly benefited from his revolutionary postulate that composer's meant pretty much what they wrote, but the musical understanding that made Toscanini a great conductor will never be found in musical notation. If this is true of wholly abstract music (i.e., works in which musical logic is the only kind of logic that pertains), how much more true it is of opera, which some of us insist is a dramatic, not a musical form (i.e., the music exists not for its own sake but in the service of a dramatic purpose).

Take as an instance a minor incident in the lnn

Scene of Forza: the disguised Carlo's attempt to extract information from the muleteer Trabuco, which results in the latter's departure from the inn in a huff "to sleep with my mules, who don't know Latin and aren't bachelors [in the academic sense]." He says pretty much the same thing twice. The first statement is set all in eighth notes, with the exception of three quarter-note downbeats for emphasis: the restatement is entirely in eighth notes. thirty-two of them in a row. Levine's solution to those fifteen bars of almost unbroken eighth notes-a machine-gun-like pulse, crisply and regularly accented-makes sense from a purely musical standpoint. It has a certain panache and punctuates Trabuco's departure with a crisp flourish, and if one goes no farther it is possible to write the character off as a beleaguered dimwit, an inconsequential and not terribly amusing comic device, a pale swatch of local color.

But have Piave and Verdi really achieved nothing more? First off, a moment's reflection discloses that any rhythm determined solely by musical values must sit awkwardly with the words, and indeed the syllables that fall on those eighth notes are not of phonetically equal length; if the tempo is not only metronomic, but quick, the singer is apt to be left struggling to keep up with the beat, which is exactly what happens to Michel Sénéchal here.

Even more important, the purely musical solution allows no consideration of dramatic sense. Who has outwitted whom? Carlo, the university-educated aristocrat. matches wits with a simple peasant, and, to the certain delight of all egalitarian spirits, it is the bumpkin who prevails. He immediately recognizes that Carlo is pumping him and parries each thrust ("when it comes to my passengers, all I care about is their money," etc.). refusing to involve himself in matters that do not advance his self-interest and specifically shunning involvement with this suspicious stranger. It is important to recognize in Trabuco's exit the feigned ignorance with which he conceals his shrewdness, for we will see it turned to considerable advantage when he reappears as a peddler in Act III.

Sénéchal, a singer who often falls back on the stalest comic clichés, seems to have some ideas about those exit lines, but he is whipped into line by his conductor. I don't suppose many people would seriously entertain the notion that Francesco Molinari-Pradelli is a better conductor than Levine, but in this instance I think he clearly is: In his Forza (London OSA 1405) the basic pace is set by the Trabuco. Piero de Palma, who capitalizes on the opportunity denied Sénéchal.

I don't mean to suggest that Levine is incompetent. His superior musicianship produces some exceptional moments—the ravishing accompaniment to "Pace, pace." for example. His reading of Forza is on balance as good as Schippers' or Gardelli's. But all three conductors largely sidestep the problem of specific characterization, and in particular the problem of all that "local color"—all those secondary characters who sing at length about everything except the plot. The traditional solution—heavy cutting—was admittedly ruthless, but have we gained that much by ritually opening the cuts while treating Melitone and Preziosilla and Trabuco and the rest as longwinded nonentities? Forza is the dramatic equivalent of a fresco: The emotional significance of its main subject is heightened by the precisely drawn side subjects that fill out the picture.

Ironically the singer who comes closest to enlivening his scenes is, in purely vocal terms, the weakest member of the cast: Gabriel Bacquier, the Melitone. He still has enough voice for the part, and in his big scenes he insists on the rhythmic flexibility essential to his portrayal. In the Act III sermon it is primarily the singer who controls the tempo anyway, and Levine has the sense to let Bacquier deliver those outrageous preachings with the deadpan self-confidence of a man persuaded of both his righteousness and his verbal brilliance. He savors those awful sanctimonious puns to the fullest, but without striving for conscious comic effect, and as a result both crowd reactions—the amusement of the Spanish soldiers, the rage of the Italians—follow logically.

Among the other cast members, the most positive contributions seem to me those of Leontyne Price and Placido Domingo. Price is in rougher voice than she was in the Schippers set, but her current technical necessities occasionally force her to find more interesting vocal solutions than of yore: either way it's a major singer in one of her major roles, getting little help from her conductor. Domingo is in peak vocal form, with the role's considerable challenges carefully thought out. Again, however, the thinking-out seems to me primarily musical. Yes, the general emotional tone is right-happy or sad, passionate or detached, affectionate or bitter. But his manner of expression seems limited to what the music communicates, not what he can communicate about Alvaro using music as a tool. In fairness, no recorded Alvaro has done much along those lines, and Domingo's is perhaps the best sung of all.

Sherrill Milnes shows commendable restraint as Carlo: the character can so easily degenerate into a monomaniac. For my own taste, however, the voice lacks the tonal plush that makes so much of Carlo's music memorable-unlike Robert Merrill (with Schippers) or Ettore Bastianini (with Molinari-Pradelli), he hasn't the reserves to reach back and let loose in the "Invano Alvaro" duet. Bonaldo Giaiotti is a vocally assured if not particularly memorable Guardiano. Fiorenza Cossotto gets off to a rocky start in Preziosilla's "Al suon del tamburo" but recovers well for the less demanding "Venite all'indovina," smartly pointed by Levine, and the "Rataplan" is decent. The casting of Kurt Moll as the Marquis of Calatrava seems like a splendid gesture; in fact his superplangent tones prove counterproductive, for the Marquis has only a few lines in the opening scene to establish the destructiveness of his overprotectiveness toward Leonora, the suffocating paternalism that warps his son and stunts his daughter emotionally.

How to choose among the three complete recordings? Since you're not going to get much in the way of dramatic insight, you might well choose according to the singers you like best; on that basis my choice would be the Schippers set, which is also sonically sharper than the newer RCA effort. If you can accept





Placido Domingo, who sings on the three RCA albums reviewed here, is one of the few artists who could be honored simultaneously by most major labels. At ceremonies naming him MUSICAL AMER-ICA's "Musician of the Year," the Spanish tenor posed with executives of "his" record companies: from left, Tony Caronia, in charge of Angel's N.Y. office: Ken Glancy, then president of RCA Records; classical a&r vice presidents James Frey (kneeling) for Deutsche Grammophon and M. Scott Mampe for Philips; Domingo; Leonard Marcus, editorial director of MA and editor of HIGH FIDE-LITY; Warren B. Syer, publisher of MA and HF; and Thomas L. Frost, Columbia Masterworks a&r director. Insets show MA editor Shirley Fleming presenting the award and Domingo with his compatriot, guitarist Andres Segovia.



the brief cut in Carlo's cabaletta, you might choose the London recording: with the likes of Tebaldi, Del Monaco, and Bastianini, you won't be bored. An invaluable supplement is the Callas/Serafin set (Seraphim IC 6088), which shows what can be done with at least portions of the score. And there is a good case to be made that the most satisfying Forzu on records remains the first—the old Cetra set conducted by Gino Marinuzzi, with Caniglia, Stignani, Masini, Tagliabue, Pasero, and Meletti.

Chénier makes an interesting companion piece for Forza, for the principal soprano, tenor, and baritone roles have striking similarities and both operas have large and problematic supporting casts. On both counts, RCA has done better by Chénier than by Forza, and were it not for some pretty stiff competition I could recommend the RCA Chénier with enthusiasm.

Levine seems to me far more comfortable here. His incisiveness and rhythmic vigor pay unexpected dividends in the normally cumbersome Act III, whose seemingly endless sequence of events can be so fatiguing. Act IV too works uncommonly well, although here the structural problem is the opposite the act is so brief that it often seems hardly worth the trouble. The first two acts suffer by comparison with the classic De Fabritiis recording of 1941 (Seraphim IB 6019). Like Levine, De Fabritiis took a rather quick approach, stressing the score's brilliant. dynamic aspects, but he had such advantages as a remarkable cast and a great orchestra (the Scala at its best) that knew the score well and played it as if possessed. It's an electrifying performance, and you need go no farther than the opening bars, where the Scala violins' breathtaking playing has in addition an uplifting dynamism not duplicated by Levine's merely accurate players; in fact throughout Giordano's marvelously constructed Act 1, DeFabritiis rhythms are uncannily well judged and executed—listen to the irresistible swagger and vitality of the music that accompanies the arrival of the guests.

This is not to denigrate Levine's National Philharmonic, which-especially in the last two acts-contributes some of the best orchestral work I have heard in a London-made Italian-opera recording. I'm not sure why this orchestra, which exists only for recording purposes, should play Italian operatic music more expressively than, for example, the London Symphony in Levine's Forza, but it does, and the result is enhanced by recorded sound markedly brighter and more vivid than that of the new Forza, which is also noticeably less distinct than the Schippers recording (made in RCA's Rome studio).

The RCA Chénier also boasts some exceptionally strong casting in the smaller roles. It would be hard to improve on Jean Kraft's Countess, Allan Monk's Roucher, or Enzo Dara's Mathieu. Kraft increasingly seems to me one of the most valuable singers on the Met roster—an unfailingly imaginative performer who makes the most of a good, if hardly outstanding, voice. Interestingly, in this season's revival she graduated from the Countess to Bersi, which she did splendidly. (On the recording Maria Ewing is a very good Bersi, with a voice that opens out excitingly on top for the Fs, F sharps, and Gs of the Act II song but is less firmly supported below.) Monk's lustrous baritone was the major find of the Met season, and he gives Roucher a stature that Illica and Giordano probably wanted but didn't quite build into their writing. Dara reinforces the excellent impression he made as Bartolo in the Abbado/DG Barbiere; there is ample bluster in his Mathieu, but enough tonal quality and intelligence to keep the character above caricature and at the same time distinguish him from his more fanatical, more bloodthirsty revolutionary superiors.

Only one of the principals is on this level: Renata Scotto. Maddalena happily doesn't lie particularly high: Before the final duet, only a passing A and the climactic B flat of "La mamma morta" take her above her upper comfort limit of A flat, and even the sustained B flats of the final duet are the most secure I have heard from her in many years. From A flat down the voice is in lovely condition, and Scotto is of course a gripping singer from the dramatic standpoint. Unlike the mature Tebaldi (on London OSA 1303), she can color her voice to the girlish naiveté required in Act I (though Tebaldi could still do this at the time of her earlier recording, for Cetra), and she fully matches the intensity of Caniglia in the De Fabritiis set. "La mamma morta" is first-rate, and her powerful "color commentary" during the Act III trial helps hold the scene together.

Domingo's Chénier is, like his Alvaro, splendidly sung, and it is no small praise to say that his performance here is good enough to warrant recording, for he is up against the classic recorded performances of Gigli (Seraphim), Del Monaco (London), and Corelli (Angel SCL 3645). It's unfair to ask any tenor to compete with the sheer vocal presence of Del Monaco or Corelli, and Domingo can't. But neither does he challenge the compelling characterization of Gigli, which is very much of a piece with that remarkable Scala performance. I have no doubt that Domingo could be as great a Chénier as his illustrious predecessors, and his Met performances this season (after the first, which had its problems) contained some of the excitement lacking in the recording. But the facts of present-day operatic life probably make it inevitable that Domingo rarely digs into a part in the way that he occasionally shows he can. I suppose we shall have to be content with the vocalism, which is impressive enough-but the performance remains unmistakably earthbound alongside those of Gigli, Del Monaco, and Corelli.

About Milnes's Gérard, 1 feel the same way that 1 do about his Forza Carlo: It's fine as long as you can accept the basic suitability of the voice. I can't. Within the first ten minutes of the opera Gérard must express elegant and sarcastic wit (the apostrophe to the couch), smoldering rage ("Son sessant'anni"), and powerful yet worshipful lust (the asides prompted by Maddalena's first appearance), and that range is dramatically expanded in Act III with "Nemico della patria," one of the great Italian baritone arias and a unique depiction of a character of passion and principle consciously betraying his own ideals. If we have had no recorded Gérard who fully realizes the role's possibilities, we do have the vibrant accounts of Bechi (Seraphim) and Bastianini (London): even Sereni (Angel) seems preferable to me.

It is worth noting that the supporting cast involves no doubling (a first on records) and that the individual casting has been accomplished with uncommon care. In Act III, Stuart Harling's rasping prosecutor contrasts tellingly with Malcolm King's more nobly voiced tribunal president. Terence Sharpe is an endearingly sappy Fléville (a darker-voiced performance than the memorable cameo the young Giuseppe Taddei contributed to the De Fabritiis recording), Isser Bushkin a convincingly pragmatic jailer. Piero de Palma, who doubled the Abbé and the Incredibile most effectively for Angel, here fakes only the smaller role of the Abbé but still sings it effectively. RCA's Incredibile is Sénéchal, who unfortunately gives one of his more stereotypical performances. I also have reservations about Gwendolyn Killebrew's Madelon, attractively sung (and marvelously accompanied by Levine) but tonally undersized for a role that wants true contraito coloration and weight. It's a shame Lili Chookasian didn't get to record the part a few years back; now I'd be curious to hear Batyah Godfrey in the part.

For Scotto's Maddalena, the strong supporting cast, Levine's conducting of Acts III and IV, and to a lesser extent Domingo's pleasing Chénier and the attractive orchestral playing, this Chénier is a major addition to the catalog. That it does not equal the similarly conceived Seraphim performance is no disgrace, for that is one of the most compelling operatic achievements on disc. (And it has the additional plus of being on two instead of three discs, which permits Acts I and II to stand uninterrupted on a single side apiece-eliminating the awkward breaks of the three-disc versions.) Nor is this the only way to approach the opera: Gavazzeni's more measured and thoughtful sculpting of the score for London makes a fascinating contrast (as does the old Italian Columbia performance conducted by Molajoli, reissued on OASI 616-- an alert and subtly inflected performance that suffers from weak casting), and he has the not inconsiderable advantage of the Tebaldi/Del Monaco/ Bastianini trio. The Angel set may not be on the same level, but it is solidly cast and Corelli alone makes it a must for admirers of this unjustly maligned opera.

#### GIORDANO: Andrea Chénier.

	naroa onomon		
Maddalena dl Coig	iny Renata Scotto (s)	Roucher	Allan Monk (b)
Bersi	Maria Ewing (ms)	Fouguier-Tinville	Stuart Harling (b)
Countess di Coign	y Jean Kraft (ms)	Major-Domo	Nigel Beavan (bs-b)
Madelon Gwer	ndolyn Killebrew (ms)	Mathieu	Enzo Dara (bs)
Andrea Chénier	Placido Domingo (1)	Fléville	Terence Sharpe (bs)
An "Incredibile"	Michel Sénéchal (t)	Dumas	Malcolm King (bs)
The Abbé	Piero de Palma (1)	Schmidt	Isser Bushkin (bs)
Carlo Gérard	Sherrill Milnes (b)		

John Alldis Choir, National Philharmonic Orchestra, James Levine, cond. [Richard Mohr, prod.] RCA RED SEAL ARL 3-2046, \$23.98 (three discs, automatic sequence).

#### VERDI: La Forza del destino.

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Trabuco	Michel Sénéchal (t)
Don Carlo	Sherrill Milnes (b)

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reviewed by ROYAL S. BROWN ABRAM CHIPMAN R. D. DARRELL PETER G. DAVIS SHIRLEY FLEMING ALFRED FRANKENSTEIN **KENNETH FURIE** HARRIS GOLDSMITH **DAVID HAMILTON** DALE S. HARRIS PHILIP HART PAUL HENRY LANG **IRVING LOWENS ROBERT C. MARSH ROBERT P. MORGAN** JEREMY NOBLE CONRAD L. OSBORNE ANDREW PORTER H. C. ROBBINS LANDON PATRICK J. SMITH SUSAN THIEMANN SOMMER

BACH: Cantatas, Vols. 15–16. Peter Jelosits and Seppi Kronwitter, boy sopranos; Paul Esswood, countertenor; Kurt Equiluz, tenor; Ruud van der Meer, bass; Tölz Boys' Choir, Vienna Concentus Musicus, Nikolaus Harnoncourt, cond. TELEFUNKEN 26.35305 (SKW 15) and 26.35306 (SKW 16), \$15.95 each two-disc set (manual sequence).

Vol. 15: No. 57, Selig ist der Mann; No. 58, Ach Gott, wie manches Herzeleid; No. 59, Wer mich liebet, der wird mein Wort halten; No. 60, O Ewigkeit, du Donnerwort. Vol. 16: No. 61, Nun komm, der Heiden Heiland; No. 62, Nun komm, der Helden Heiland; No. 63, Christen, ätzet diesen Tag; No. 64, Sehet, welch eine Liebe.

Nos. 57, 58, and 60 are "dialogue" cantatas. No. 57, composed for St. Stephen's Day, is a grave dialogue between Jesus (bass) and the Soul (treble): two minor-key arias in triple time, in five-part texture; a confident aria from Jesus; then a questioning one, with fluttering solo-violin obbligato, for the Soul, which ends abruptly on a question ("Here's my soul; what do you give me?") and is answered by the affirmative closing chorale.

Ruud van der Meer sings with beautiful courtesy, serenity, and sureness. Peter Jelosits, primo fanciullo of the Vienna Choir Boys, is-or was-a pearl among trebles, even throughout his wide range, secure, strong, very accomplished in divisions, fervent in expression. But, in our centurynore humane in this respect than earlier ages-even the most remarkable boys' voices are allowed to break: treble tone is more fleeting than woman's beauly. So Master Jelosits, I understand, recorded as much treble music as possible in advance, to be kept on tape and dropped into the cantatas as the series progressed.

He recorded the outer movements of No. 58. in each of which he sends a chorale melody shining out, singing of the Soul's weary way, while Jesus replies in comforting

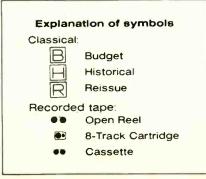


Ruud van der Meer Bach with beautiful courtesv

arioso. These are two complicated and beautiful movements, and the two voices are a fine match. But Jelosits apparently did not get 'round to recording the central aria, with violin obbligato; here Seppi Kronwitter, from the Tölz Boys' Choir (Tölz is a town on the Isar, south of Munich), takes over, and he is not really in the same classless even, less sure, and sometimes breathy. Jelosits is back in No. 59, which opens with a treble/bass duet, against strings, trumpets, and drums. Nos. 58 and 59 are short cantatas, twelve minutes and three seconds and twelve minutes and five seconds, respectively, and it seems needlessly extravagant of Telefunken to have allotted them a separate side each, when they could easily have been accommodated together on one.

In No. 60, the dialogue is between Fear (alto) and Hope (tenor), and the orchestra includes "corno" (played on a valve trumpet) and oboes d'amore. By Paul Esswood and Kurt Equiluz it is exquisitely sung; there are no arias, only duets and dialoguerecitatives. In the last recitative, a bass voice then stills Fear's fear with arioso entries on "Selig sind die Toten," each time at a different pitch. The final chorale is "Es ist genug," better known to modern listeners from its citation in Berg's violin concerto.

The accompanying essay, naturally, is on the subject of "The Dialogue in Bach's Cantatas." It is by Friedhelm Krummacher, and his English translator, so far from making



the crooked straight, or the tough phrases plain, writes in the language of a government department. We are told, for example, that the "multi-dimensional structure ... calls for a mode of listening which, in relation to the intensive interpretation of the words, also perceives the motif-processed uniformity of the setting." But the German is more shapely, and there is sense in what Krummacher says. The four cantatas share an intimate quality, and each of them has striking examples of recitative breaking into emotional arioso.

Vol. 16 contains two Advent and two Christmas cantatas, one of each a Weimar and one a Leipzig work. No. 61, the first of Bach's numerous Nun komm, der Heiden Heiland settings, begins with a "French overture" in dotted rhythms, through which the voices in succession sing the first line of Luther's hymn, with its third note sharpened. There is a polyphonic central section, for voices and instruments in unison, and then a brief return to the opening texture for the final line. Then a tenor aria: a bass recitative accompanied by regular pizzicato chords ("I stand before the door and knock"); a treble aria with a very pretty, unconventional rhythmic pattern, stopping and starting; and an extraordinary finale where the trebles sing a descending scale in long notes, the other parts are florid, and a running vidlin line goes soaring up to a final G in alt.

No. 62 is from Bach's second Leipzig cycle, and follows the pattern of an elaborate first movement based on the chorale, and a simple setting of it as finale. There is a bass aria in somewhat Handelian vein, accompanied by an energetic unison line, and a string-accompanied recitative for the treble and alto in thirds and sixths. No. 63, a rich and splendid work, may have been composed as a demonstration piece. It opens with a big chorus in which instrumental quartets-of three oboes and bassoon, four trumpets with drums, and strings-alternate and combine; and it closes with another, in which the almost unaccompanied vocal sections move at a slower pace-within the same meter-as the florid instrumental music. Set in this frame are two duets: Soprano and bass take their cue from the words "gut gefüget," and alto and tenor from "kommt zu Reihen." (The English singing translation misses both points.) The introductory recitatives to both are elaborately accompanied.

No. 63 is not particularly Christmasy; the text is about despising the world. But as Bach's thoughts turn toward heaven the music becomes more joyful-in a treble aria, where the violins depict worldly things vanishing like a puff of smoke (the figuration is picked up from an earlier recitative), and in an alto aria with oboe d'amore obbligato.

The numerical order of the cantatas in the old Bach edition, preserved in the BWV numbering and followed in this Kantatenwerk series, seems to have no rational basis. But chance brings together, in Vol. 16, four works that span an uncommonly wide range of styles, fextures, and forms, and so it can be recommended as a starting point for anyone who is not yet collecting the whole series as it appears. Master Jelosits is the brilliant treble in all but No. 61; there it is Master Kronwitter, again not his equal. but touching in his earnest delivery. Esswood is slightly coo-ey in the long arioso recitative of No. 63, stronger in the aria of No. 64. Equiluz omits some needed trills in No. 62, but is otherwise a most pleasing Bach singer. And Van der Meer is an unfailingly admirable bass. Harnoncourt conducts without the mannerisms that are sometimes disturbing in the Leonhardt performances (the two men share direction of the series). The playing seems to me beyond praise. The sound in itself is a joy. The recording is perfect.

The essay in Vol. 16, by Ottfried Jordahn, sets the cantatas in their original context. Sunday services in Leipzig began at 7:00. Organ prelude. introit in the form of a Latin polyphonic motet, Kyrie, Gloria, Epistle, hymn, Gospel-and then the cantata, the libretto for which had been published well in advance. Then the sermon, "usually lasting about one hour." Then the consecration, followed by communion, "which frequently lasted an hour or more. ... As a rule, some three hundred or four hundred of the faithful took communion." At this stage there were motets, parts of cantatas, even whole cantatas. The three-hour or fourhour Mass ended with another hymn. So, Jordahn remarks, it is hard to bring Bach's cantatas back into liturgical use; once, they took up only about an eighth of the whole service, but "as a rule they burst the bounds of the church service of today. A.P.

BACH: Concerto for Harpsichord and Strings, No. 5-See Franck: Symphony in D minor

BRAHMS: Concerto for Piano and Orchestra, No. 2, in B flat, Op. 83, Solomon, piano; Philharmonia Orchestra, Issay Dobrowen, cond. TURNABOUT THS 65071, \$3.98 (mono) [from HMV originals, 1947].

This is the first domestic release of a famous performance available first as a premium-priced 78-rpm import and recently in a British LP transfer distributed here by Peters International

The British planist Solomon, incapacitated by a stroke in midcareer, was a remarkable artist. His polished style and cool, chaste sense of proportion gave him the reputation for being a miniaturist, but, as this masterful interpretation of Brahms's mammoth work demonstrates, he was capable of rising to the big moments-tonally and interpretively. Granted, he eschews some of the burly heft heard in the Backhaus and Rubinstein/Ormandy recordings and he avoids the overtly emotional rhythmic gestures of Arrau, but in the end he presents a manly, direct, and exciting reading, with every note impeccably in place and borne aloft in long, sinewy lines and propelled by excitingly rhythmic tempos.

Issay Dobrowen, a conductor of strong discipline and firm architectural grasp, offers distinctive support. His crisply articulated framework is less emotionally charged than Toscanini's (in the celebrated collaboration with Horowitz, also still obtainable) but, in its reserved way, full of



Robert Leonardy Intelligent, sophisticated Chopin

thrust and personality. The 1947 sound is still more than adequate, and transfer and pressing are both fine. This is a cherishable disc. H.G.

CHOPIN: Piano Works. Robert Leonardy, piano. [Oscar Waldeck, prod.] EURODISC 89 836 XAK, \$7.98 (distributed by German News Co.).

Ballade No. 4, in F minor, Op. 52. Etudes: in E, Op. 10, No. 3; In C minor, Op. 10, No. 12. Impromptu No. 4, in C sharp minor, Op. 66 (Fantalsie-Impromptu). Nocturne in E flat, Op. 9, No. 2. Pólonaise In A, Op. 40, No. 1. Preludes, Op. 28: No. 6, In B minor; No. 15, in D flat; No. 20, in C minor.

Robert Leonardy, from the Saarland, is a youngish pianist (thirty-seven years old) with a musical background part Teutonic and part French. (Among his mentors are Andor Foldes, Jean Doyen, and the late Marguerite Long.) One can hear both influences in these performances: a thoroughgoing, rather analytical, harmonically oriented style of phrasing expressed in terms of a pellucid, typically Gallic kind of sonority. In the Fontaisie-Impromptu and the E major Etude, I began to fear that his slight habit of ritarding phrase ends for harmonic emphasis would lead him to eccentricity. But by the time he had come to the stately C minor Prelude, it was very obvious that here is an intelligent, sophisticated player who employs certain mannerisms of the old school (rhetorical inflections, some anticipation with the left hand, elaborate rubato. etc.) with an intellectual awareness and basic musicianship.

It is all slightly reminiscent of the Chopin playing of Stefan Askenase and Robert Goldsand-with the compliment that implies. Extravagant, perhaps, at times, but ultimately satisfying. Leonardy is particularly good in the A major Polonaise (which he treats more objectively than the other pieces in his recital-a performance somewhat akin to Pollini's recent one). in the preludes (the D flat is lovingly shaped and resourcefully voiced), and in the F minor Ballade (which he brings to a thrusting climax). Some listeners will undoubtedly be irritated by some of Leonardy's strettos and teasing caesuras, but I give him a "yea" vote.

Bright, rather cutting reproduction of the piano in a moderate-sized studio; excellent processing. H.G.

DEBUSSY: Nocturnes\*; Images for Orchestra: No. 2, Iberia. Women of the Oratorio Society of Washington\*, National Symphony Orchestra, Antal Dorati, cond. [James Mallinson, prod.] LONDON CS 6968, \$7.98. Tape: CS5 6968, \$7.95.

DEBUSSY: La Mer; Prélude à l'après-midi d'un faune. RAVEL: Bolero. Chicago Symphony Orchestra, Georg Solti, cond. [Ray Minshull, prod.] LONDON CS 7033, \$7.98. Tape: CS5 7033, \$7.95.

DEBUSSY: Nocturnes\*; La Mer; Prélude à l'après-midi d'un faune. ORTF Chorus\*, Orchestre National de l'ORTF, Charles Munch, cond. TURNABOUT TV-S 34637, \$3.98.

DEBUSSY: Nocturnes\*; Images for Orchestra: No. 2, Iberia; Prélude à l'après-midi d'un faune. Netherlands Radio Philharmonic Choir\* and Orchestra, Jean Fournet, cond. [Raymond Few, prod.] LONDON PHASE-4 SPC 21104, \$7.98.

Of the three new recordings of the Nocturnes, Dorati's begins with a commanding lead by adopting a basically brisk tempo for "Nuoges," like Boulez before him (Columbia M 30483). This makes evident the piece's pointillistic, disembodied quality and its almost Mussorgskyan vein of lyricism. Also like Boulez, however, Dorati has trouble quickening at the "un peu animé" of No. 7 and then broadening at the ending. These important contours are better drawn by Ansermet (London CS 6023) and Martinon (Angel S 37067) at their slower basic speeds, so it's something of a tradeoff. Munch's "Nuoges" is conventionally slow and static, murky in texture, with little in the way of enlivening detail or distinguished playing. Fournet's is a moderate and uneventful reading, but at least the Phase-4 miking is anything but murky.

"Fêtes" is a bit more of a contest. Fournet is deliberate, but the dynamic range is fine and the initial muted trumpet entrance in the procession episode sounds appropriately distant yet peremptory. Munch is very slow, and one must turn to his currently unavailable Boston Symphony recording (which included only "Nuages" and "Fêtes") to hear the gleaming brilliance he could bring to the score. Dorati is crisp and pointed, though at Fournet's tempo he might have approximated the grand swagger of Boulez and Ansermet, whose voiceleading I find more convincing anyhow (e.g., Dorati's trumpets don't assert themselves sufficiently over the strings in the climax of the procession).

In "Sirènes," Munch's chorus sounds right on top of the mike and seems to be singing "la-la" rather than humming wordlessly. For over-all color, texture, and compelling urgency. I'm still sticking with Martinon, Ansermet, and Boulez.

More interesting than Munch's Turnabout Nocturnes is his coupled La Mer-a more flexible, not to say eccentric, interpretation than his earlier BSO version (RCA Victrola VICS 1041). Such moments as the "cédez un peu" at No. 6 in the first movement provoke an all-out response. The soft central section of the final movement is generously provided with the rubato Debussy asked for, and the preceding stormy music (Nos. 48-52) gets whipped up to the point where rhythm and ensemble

are a bit precarious. It's all terribly exciting, even to such a minor detail as the string basses' accenting of their opening motifs in the last movement, though elsewhere much is underarticulated, the French players have some of the usual vibrato problem, and the middle movement has many detectable tape splices. On this recording, Munch happily adopted the "old-fashioned" seating plan with left-right splitting of violins, as well as of cellos and double basses. This account also departs from his BSO version in excluding the brass parts Debussy added in the finale between Nos. 59 and 60. (Perhaps they are simply absent from the Paris orchestral parts? On Turnabout, Munch seems to be trying to fill the void at that point grunting and stamping his feet.)

Solti's La Mer, unsurprisingly, has all the finish, control, and sonic transparency lacking in the Munch/Turnabout; this recording reproduces Debussy's score about as clearly as does the Szell/Cleveland rendition (Odyssey Y 31928). Sir Georg is obviously seasoned in his approach to the score, which is basically straightforward, but with some nice individual trademarks: a rhetorical pause at No. 60, really soft playing of the brazen cornet solo just before No. 58 (it is marked with mute), something like the brass reinforcements Toscanini (on the NBC recording) provided before No. 5. There is a slight tendency to vitiate contrasts that may bother those who prefer a more emphatic approach (e.g., the initial switch from "très lent" to "modéré" and the legato blandness of the tutti chords marked sfz four bars after No. 8). All in all, though, Solti's moves comfortably to the top half-dozen or so among current La Mers.

The satisfaction of seeing all three new recordings of the Nocturnes complete is partly offset by some backsliding in the case of the orchestral Images, with both Fournet and Dorati recording only the most popular of the three, Iberia. Of the current listings for Iberia alone, however, these two performances are more satisfying than all save Munch's languorously seductive one on Nonesuch (H 71189). Fournet's relative imperturbability about rhythmic shifts, a marked shortcoming in his Nocturnes, is turned to real advantage in Iberia. This is a blunt, earthy, honestly taut and muscular reading in much the same vein as the longdeleted Columbia mono by the Pittsburgh Symphony under Reiner (whose Chicago remake, RCA Victrola VICS 1025, has always struck me as effete and indecisive). Moreover, the Phase-4 multimike techniques are used to relatively unobtrusive advantage in clearly differentiating all the kaleidoscopic wisps of instrumental color. (Whether the tonal refinement of the Netherlands Radio players warrants such scrutiny is another question.) Dorati is clearly a more cultivated musician, and he is able to shape the central "Parfums de la nuit" movement with an ardently singing sweetness (an admirable accomplishment, given the string section at his disposal) and an undulating forward urgency. The finale has plenty of gusto, too.

The prelude to Mallarmé's L'Après-midi d'un faune, one of Impressionism's earliest symphonic manifestos, is hard to ruin in performance, and so the casual runthroughs of Munch and Fournet do not offend even if they cast no great light. Solti's Faune, by contrast, is one of those performances that remind one anew of the piece's true stature. The reading is broad, with stately and squared-off phrases, hypnotically reserved and controlled, dark and rich in texture. It is the best foil available for the more sparely achromatic, piquant Boulez (Columbia MS 7361).

As for Bolero, Solti gets through Ravel's "seventeen minutes of orchestration without any music" in too much less than seventeen minutes to satisfy the purist in me, but the orchestration is gleamingly showcased. A.C.

DVORÁK: Serenade for Strings, in E, Op. 22. TCHAIKOVSKY: Serenade for Strings, in C, Op. 48. English Chamber Orchestra, Raymond Leppard, cond. PHILIPS 9500 105, \$7.98. Tape: 7300 532, \$7.95. Comparisons: Barenboim/English Chamber O. Marriner/St. Martin's Academy Argo ZRG 848

Since Barenboim broke the long hiatus in SCHWANN (November 1975) the string serenades of Dvořák and Tchaikovsky have become a frequent twosome. In addition to this new disc, Argo has recently paired the admirable Marriner performances, previously coupled with other material.

Of the three records, Philips' has the invaluable distinction of stereo separation of

BACH: Arias. Baker, Marriner. ANGEL S 37229, July

first and second violins, welcome indeed in view of the frequent wisps of animated dialogue in which the two sections engage throughout both scores. This makes it all the more frustrating that I can't like Leppard's readings better than I do. There is certainly little to debate with respect to tempos; Leppard's are sanely chosen. Balances are judicious, and there is no question of the excessive tonal weight I complained of in the Bernstein and Stokowski recordings of the Tchaikovsky (November 1976). Indeed the English Chamber Orchestra's articulation of the thirty-second-note figures in the third movement of the Dvořák, rather slurry under Barenboim, is trim and athletic under Leppard.

Yet the new record has a certain metronomic stolidity—most pronounced in, but not limited to, the waltz movement of the Tchaikovsky. Leppard seems indifferent to expressive shaping of phrases and, perhaps due to a chilly recording acoustic, I get the impression of monochromatic tone. With Barenboim, the ECO really sings with an effulgent and warm texture, however one might raise eyebrows about the generous vibrato and portamento. If Barenboim's interpretations seem a bit pulled-about next to Leppard's self-effacing steadiness, the former at least displays a genuine affection for the music.

One way around this dilemma is to turn to Marriner, whose renditions I have found uncommonly easy to live with. There is barely a trace of sugary sentiment, a few minor rhythmic distensions in the Dvořák



BEETHOVEN: Symphonies (9). Haitink. PHILIPS 6747 307 (7), July. BRAHMS: Cello Sonatas (2). Piatigorsky, Rubinstein. RCA RED SEAL ARL 1-2085, June. DONIZETTI: Gemma di Vergy. Caballé, Lima, Queler. COLUMBIA M3 34575 (3), June. DVORÁK: The American Flag; American Suite. Thomas. COLUMBIA M 34513, July. HANDEL: Double Concertos; Overtures. Marriner. ANGEL S 37176, May. MAHLER: Symphony No. 9. Giulini. DG 2707 097 (2), July MENDELSSOHN: Plano Works, Keene, LAUREL-PROTONE LP 12, July. MUSSORGSKY: Pictures. Giulini (with Prokofiev: Symphony No. 1). DG 2530 783. Joselson (with Prokofiev: Visions fugitives). RCA RED SEAL ARL 1-2158. July OFFENBACH: La Vie parisienne. Crespin, Mesplé, Plasson. ANGEL SBLX 3839 (2), June. PROKOFIEV: Symphonies Nos. 1, 7. Weller. LONDON CS 6897, June. PUCCINI: Suor Angelica. Scotto, Horne, Cotrubas, Maazel. COLUMBIA M 34505, July RACHMANINGFF: Piano Concertos Nos. 1, 2. Vásáry, Aranovich. DG 2530 717, June. RACHMANINOFF, GLINKA: Songs. Vishnevskaya, Rostropovich. DG 2530 725, July SCHUBERT: Trout Quintet. Tashi, RCA RED SEAL ARL 1-1882. Beaux Arts Trio et al. PHILIPS 9500 071. June SHOSTAKOVICH: Symphony No. 14. Rostropovich. COLUMBIA/MELODIYA M 34507, June. SIBELIUS: Symphony No. 1; Finlandia. C. Davis. PHILIPS 9500 140, June. THOMSON: The Mother of Us All. Santa Fe Opera, Leppard. New WORLD NW 288/9 (2), July. VERDI: Macbeth. Cossotto, Milnes, Carreras, Raimondi, Muti. ANGEL SCLX 3833 (3), May. WEILL: Vocal and Instrumental Works. London Sinfonietta. DG 2709 064 (3), May. WOLF-FERRARI: II Segreto di Susanna. Chiara, Weikl, Gardelli. LONDON OSA 1169, May. WYNER: Intermedio. Sollberger: Riding the Wind I. CRI SD 352, July CHANTS FOR THE FEASTS OF MARY. Schola Cantorum Francesco Coradini. ARCHIV 2533.310.

GUIDE TO GREGORIAN CHANT. Schola Antiqua et al. VANGUARD VSD 71217. July. HISTORIC INSTRUMENTS: Flute, Keyboard Works. Hart, Bonn. PLEIADES P 105, July. PAUL JACOBS: Piano Recital (Etudes). NONESUCH H 71334, May. DAVID MUNROW: Music of the Gothic Era. ARCHIV 2710 019 (3), July. aside. Yet Marriner shapes the scores with flexibility, textual fidelity, constant attention to the molding and building of dynamics and phraseology, and an over-all intensity of involvement. The Academy of St. Martin-in-the-Fields plays gorgeously.

Now that this logical coupling is so well taken care of, how about some renewed attention to the Dvořák string serenade's other "natural" mate, the same composer's D minor Wind Serenade? A.C.

FAURÉ: Pelléas et Mélisande—See Franck: Symphony in Diminor.

FAURÉ: Songs. Elly Ameling, soprano<sup>1</sup>; Gérard Souzay, baritone<sup>2</sup>; Dalton Baldwin, piano. CONNOISSEUR SOCIETY CS2 2127 and 2128, \$15.96 each two-disc set.

FAURÉ: Songs. Jacques Herbillon, baritone<sup>11</sup>; Anne-Marie Rodde, soprano<sup>11</sup>; Sonia Nigoghossian, soprano<sup>11</sup>; Theodor Paraskivesco, piano. MUSICAL HERITAGE MHS 3438/43, \$29.70 (\$21 to members), plus 95¢ postage (six discs; Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755).

CS2 2127: Op. 1: Le Papillon et la fleuri ", Maiña, Op. 2: Dans les ruines d'une abbayet "; Les Matelots-", Op. 3: Seulet-", Sérénade toscane", Op. 4: La Chanson du pécheura"; Lydia-a. Op. 5: Chant d'automnet-"; Réve d'amourt-", L'Absent", Op. 6: Aubade-"; Tristesset-; Sylviet-: Op. 7: Après un rével ", Hymnet "; Barcarollera", Op. 8: Au bord de l'eaut-"; Le Rançon ", Ici-bast-1. No opus number: L'Auroret-", Op. 18: Nell-"; Le Voyageur--; Autommet-", Op. 21: Poème d'un jour-", Op. 23: No. 1, Les Berceauxt-; No. 2, Notre amourt-1: Op. 51: Larmes-"; Au cimetiteret-; Spleent-1; La Roset-: Op. 57: Chanson de Shylock+"; Madrigal de Shylock+", Op. 58: Clng Mélodies "de Venise"-", Mandoline; En sourdine; Green; A Clyméne; C'est l'extase. Op. 55, La Chanson d'Evel-', Vocalise-Etude (1907)-",

CS2 2128: Op. 23: No. 3, Le Secretta, Op. 27: Chanson d'amourai, La Fée aux chansons (Op. 39: Auroreais, Fleur jetéeta; Le Pays des rêvesta; Les Roses d'Ispahanto, Op. 43: Noëlta, Noourset, Op. 46: Les Présents (Clair de luneais, No opus number: En préferais Sérénade du Bourgeois Gentilhommeta, Op. 46: Les Présents (Op. 76: Le partum impérissable), Arpégeta, Op. 83: Prisona; Soirta, Op. 85: Dans la forét de septembreta; La Fleur qui va sur l'eaura; Accompagnementa; Nolopus number: Mellsande's Song (I'in French], Op. 87: Le plus doux chemina; Le Ramiera; Op. 92: Le Don silencieux<sup>24</sup>, Op. 94: Chanson<sup>14</sup>, Op. 106, Le Jardin closh (Nos. 2, 3, 7); others), Op. 113, Miragesa, Op. 114, C'est la paix (Iomitted In MHS set), Op. 118, L'Horizon chimérique<sup>24</sup>, Op. 10: Puisqu'ici-bastatia; Tarentelle<sup>11,14</sup>, Op. 72, Pleurs d'ortation.

The songs of Gabriel Fauré span a period of six decades, from the 1861 Victor Hugo settings to the masterly economy of L'Horizon chimérique in 1921-a personal development that paralleled (and often led) the general transformation of the vocally oriented romance into the mélodie, the French art song in which voice and piano are equally significant. To have this development fully documented in sound is the most welcome aspect of these two releases (both were originally prepared in France, for the fiftieth anniversary, in 1974, of the composer's death), though, as will become clear, neither constitutes a completely satisfactory presentation of the matter at hand. A similar survey was issued on Westminster some twenty years ago, and has long been out of print: it employed five different singers. including Renée Doria, Berthe Monmart, and Pierre Mollet. I didn't have access to a set for comparison, but perhaps my comments on the new recordings will be sufficiently helpful to older collectors wondering whether they should supplement or replace the earlier recording.

Except for Musical Heritage Society's omission of the unhappy "C'est la paix," Op. 114, the contents of these sets are identical, including the three duets as well as all the solo songs. However, the division of labor is dissimilar: For Connoisseur Society (hereafter CS), Elly Ameling and Gérard Souzay divide the songs more or less equally, while the MHS box assigns to baritone acques Herbillon all but the very few songs (e.g. La Chanson d'Eve) that really cannot be sung by a man-even though this means using two singers for Le lardin clos. It also means, among other things, that MHS gives us more songs in the original keys: The majority of Fauré's songs were

#### Goddard Lieberson (1911-1977)

It seems like only yesterday (actually, it was in the December 1975 issue) that Goddard Lieberson was reminiscing with Martin Mayer and outlining his many plans for his second try at retirement. (The first had been cut short in 1973, when he was lured back to help CBS Records weather the storm surrounding Clive Davis' departure.) One fruit was CBS-TV's July Fourth special They Said It with Music: From Yankee Doodle to Ragtime, which became a posthumous tribute of sorts when Lieberson died of cancer in his Manhattan home on May 29 at the age of sixty-six.

Lieberson's spectacular career, which took him from the Columbia recording studios to the presidency of the Records Group and a seat on the board of CBS, Inc., is too familiar (and far too full) to recount here. The magnitude of his impact on the arts and entertainment worlds is reflected in the gaping hole left by his death. Harder to express, at least to those who never met him (even briefly), is the personal loss—his unflappable charm and soft-spoken command in every imaginable situation. We miss him already.

written for medium voice, and Herbillon needs to transpose rather fewer than Ameling (upward) or Souzay (downward). It also makes for less tonal variety, especially since the duets and the songs assigned to the soprano are segregated at the end, outside the album's otherwise basically chronological sequence—a fact that will bother those planning to listen in large helpings more than those who want the set primarily for reference to individual songs.

In my own view, such a complete set ought surely to be conceived primarily as a kind of reference work. Some of the early songs, for example, are hardly worth our attention except as links in the chain of Fauré's artistic development; those who

want artistically arranged recital programs of the best Fauré songs should probably turn to single records. The presentation of both these sets does suggest that they have been planned as reference works-although in neither case has that presentation been completely successful; in fact, the advantage and drawbacks of each are more or less complementary. This is too bad; although naturally the ultimate decision about preference will probably depend on the musical performances, the pleasure and knowledge we will derive from those performances is in considerable part dependent on the help we get from the associated literary material. And since, in omnibus sets of this kind, it's frequently impossible to reach clear-cut decisions on purely musical grounds, merely an uneasy balancing of positive and negative factors, producers ought to bear in mind that a well-planned. well-packaged set may well sway the undecided purchaser.

In this case, CS starts out with the best basic ingredients for its booklet. There is a lengthy, informative, and thoughtful essay on the songs by Jean-Michel Nectoux, who has also compiled a detailed catalogue, with information about keys, dates, dedicatees, first performances, and publishers whereas MHS has an effusion by Philippe Olivier that its translator, David M. Greene, characterizes better than I can: "a combinacharacterizes better than I can: "a combination of high-flown rhetoric, colloquialism, obscure allusions, and telescoping of ideas unlike anything I have ever encountered. I could not resist trying to preserve something of its unique, if baffling, flavor."

Well, Mr. Greene has succeeded-all too well, one is tempted to say. Olivier's essay, though a splendid specimen of what often passes for intellectual substance in French critical and historical circles, will be useless to the average American interested in learning about Fauré and his songs. Nor does MHS provide any information about the individual songs except their opus numbers and the names of the poets. The contents listing on the front of the booklet, as well as the Olivier essay, is riddled with typographical errors and omissions (including every single accent, even the one on the composer's name!). Nor is any information given about who sings which songs: the label does reveal that Anne-Marie Rodde sings La Chanson d'Eve and that all three singers are heard on the final side, but then Miss Rodde also turns up, without warning, to do three songs of Le Jardin clos!

However, with the exception already mentioned, MHS does present the songs substantially in the order of their publication (not always the same as that of composition), while CS's sequencing is merely baffling. The first volume begins by following Nectoux's chronological list, then skips from Op. 23 (1879) to Op. 51 (1888), and then from Op. 58 (1891) to Op. 95 (1906): the second volume fills in the gaps, though in a similarly erratic and unfathomable sequence. This is a particular nuisance because the set is divided into two partseven if you know whether the song you are looking for is an early or a late one. you may have to take both boxes off the shelf to find it. (Suggestion: Since all four discs and both booklets fit nicely into one of the album boxes, you can simplify life-and save

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Both companies have commissioned new translations of the songs, of which Royal S. Brown's, for CS, seem to me at least slightly preferable (e.g., his "The Noble Song," for La bonne chanson, is a less literal but truer rendering than Greene's "The Good Song"). Yet again we face Hobson's choice: Brown's translations have been printed following the original French instead of alongside it-in the case of the cycles, following the entire cycle, often a page-turn away from the matching French. Greene's English is given in parallel columns, but printed from typescript reduced to near-illegibility (I'm happy to report that the typewriter does at least have accents). In either case. full appreciation of the songs is made palpably more difficult-in CS's case, through sheer thoughtlessness, since a proper layout would have been no more space-consuming than the cumbersome one employed.

One more annoying detail: the record labels. MHS doesn't give band numbers, so you have to count tilles to find which band you want. CS uses letters instead of numbers, which is a nuisance, especially when bers which is a nuisance, especially when have you ever tried subtracting *j* from *m*? And for some silly reason they've cluttered up the labels with the names of the poets, so the type has to be very small and is run together in a block rather than set out in easyto-grasp tabular form. The whole affair seems to have been designed by somebody who doesn't actually listen to records.

All this is tedious to describe, but important to the purchaser. It means that neither set is particularly convenient to use, unless your only requirement is a stack of Fauré to throw on the changer for background music. It means that you will have to work to get the most out of the words of the songs, especially in the CS set. And only from CS will you get a reliable, comprehensible introduction to the music, an idea of its musical, literary, and cultural context-and I might add that Nectoux's essay, elegantly translated by Brown, is certainly the best thing on the subject in the English language-far more detailed than the treatment in any survey book, much more intelligent than the vapid maunderings of Emile Vuillermoz' biography of the composer.

Which brings us at last to the performances. The first thing to say is that all these singers and pianists are well in the picture stylistically; even in their less inspired moments, they uphold the remarkably high standards that have long prevailed in this literature on records (though purists will rightly cavil at Herbillon's preference for the uvular r over the trilled one traditional in classical French singing). The pianists are both admirable, with my preference to MHS's Paraskivesco for his stronger profiling of Fauré's all-important bass lines: whether in the conventional figurations of the early songs, the vivid concertante writing of the middle period, or the austere, often unfigured, essentially contrapuntal late works, the movement of the bass shapes the progress of this music.

One's reaction to the MHS set, though, will necessarily depend on one's reaction to Jacques Herbillon; Anne-Marie Rodde, a singer of lovely tone and considerable sen-

sitivity, is no whit inferior to her more celebrated opposite number in the CS set but she's involved in only about one-sixth of the songs. Herbillon's voice is a small one, even by the standards of this literature, and it becomes somewhat nasal at the top and under pressure. The tonal quality is otherwise attractive, and his musicianship is excellent: firm intonation, clear diction, accurate rhythm. If he sometimes inclines to tempos faster than the traditional ones, these often turn out to be precisely what Fauré's metronome mark calls for (e.g., "Prison," "Le Parfum impérissable")though his "Au cimetière" is too fast by any measure. He gets low marks for a tendency to aspirate melismatic passages, and in the bigger songs, such as "Poème d'un jour, the strain at the climaxes can be a trial.

Other singers have drawn some of these songs on a larger canvas, and rightly sobut Herbillon rarely offends against sense or taste. Though over the course of the entire set one is likely to become troubled by his limitations, it may indeed be doubted that any singer could encompass all this material without disclosing equivalent-if different-limitations. All in all, this is very musicianly work; rarely memorably individual, it's also rarely annoyingly so. I enjoyed listening to this set.

Enjoyment of the CS set is unfortunately a chancier thing, primarily because of the condition of Gérard Souzay's voice. No question of his authority in this music, of course-but the tone is now often unsteady, monotonously wooden, so that the musical line falters when it should most bloom. Souzay's sense of projection can still carry him through ("Ici-bus!," for example), and his conceptions can be more imaginative than Herbillon's (a more expansive approach to the last song of L'Horizon chimérique, a lighter touch in the last one of Mirages), though alas usually realized only in part. There is wisdom, sensitivity, experience in these performances; if only they had been recorded years earlier! (Philips 835 286, a Fauré recital from about 1962, is a better demonstration of Souzay's art. though I would most like to hear some of his early Decca/London recordings.)

Elly Ameling is in fine, fresh voice, and her musicianship is. as usual, beyond question. I wish she hadn't transposed so many songs upward, for this brings out an occasional problem in the passage to the upper register (as well as the inevitable diction difficulties); on the evidence of the two late cycles, sung untransposed, her lower register is ample and expressive. These remarkable works are, I think, her best achievement here; she sets forth the almost parlando vocal line without losing fullness of tone, firmness of legato. Elsewhere, the same reserve is less effective; the very early songs, in particular, want a more aggressive personality to fill out their relatively meager outlines: Compare Maggie Teyte in "Les Roses d'Ispahan," with the beguiling portamentos on the name "Leilah," or Povla Frijsh's lightly skipping "Nell." Still, nothing Ameling does is less than wholly musical, and much here is quite special in its skill and refinement.

Does that help you make up your mind? Probably not. If you are more interested in fine performances than in completeness. I

commend to your attention Kruysen's splendidly broad, mellifluous, elegant singing of La bonne chanson, Mirages, and the songs of Opp. 76 and 85 on Telefunken 6.41298, a disc only slightly spoiled by excessive pickup of sibilants. And, if you can find it, the indispensable Fauré record is still Panzéra's collection, once on Pathé COLH 103; copies of the Japanese pressing still turn up in import stores. This is grand singingwhat Souzay should sound like but doesn't-yet with great reserves of warmth. That disc included Panzéra's unforgettable account of L'Horizon chimérique, which is dedicated to him; fortunately, this was also included in the recent Pathé fiftieth-anniversary historical set (2C 153 12845/6), along with other song recordings, Germaine Cernay's recordings from the opera Pénélope, and important instrumental and orchestral recordings. Maggie Teyte's Fauré recordings are all included in EMI's recent retrospective of the singer (RLS 716)-variable, but highly individual. Other justly celebrated old recordings may be harder to find: Bernac's "Lydia," Jane Bathori's "Clair de lune" (the singer's own accompaniment more subtly rhythmed than any 1 have heard in this song). Claire Croïza's "Soir.

But back to the matter at hand. If forced to a choice, I think I would settle on the MHS set because of Herbillon's reliability and Paraskivesco's playing-but then I have all those recordings mentioned above to provide variety and imagination. And I'd hate to be without the Nectoux essay either ... and Miss Ameling is a lovely singer ... and I guess you'll have to decide for yourself. D.H.

FRANCK: Symphony in D minor. FAURÉ: Pelléas et Mélisande. New Philharmonia Orchestra, Andrew Davis, cond. [Paul Myers, prod.] COLUMBIA M 34506, \$7.98. Tape: (•• MT 34506, \$7.98.

**FRANCK:** Symphony in D minor; Symphonic Variations\*. Ilse von Alpenheim, piano\*; Royal Philharmonic Orchestra, Antal Dorati, cond. TURNABOUT TV-S 34663, \$3.98.

FRANCK: Symphony in D minor; Symphonic Variations\*. Pascal Rogé, piano\*; Cleveland Orchestra, Lorin Maazel, cond. [Michael Woolcock, prod.] LONDON CS 7044, \$7.98. Tape: CS5 7044, \$7.95.

**FRANCK:** Symphonic Variations; Les Djinns.\* D'INDY: Symphony on a French Mountain Air.\* Aldo Ciccolini, piano; Orchestre de Liège, Paul Strauss, cond.\*; Orchestre de Paris, Serge Baudo, cond.\* ANGEL S 37247, \$7.98 (SQ-encoded disc).

**FRANCK:** Symphonic Variations\*; Les Djinns\*; Les Eolides. Mark Westcott, piano\*; Royal Philharmonic Orchestra, Paul Freeman, cond. MUSICAL HERITAGE MHS 3515, \$4.95 (\$3.50 to members) plus 95¢ postage. Tape: MHC 5515, \$6.95 (\$4.95 to members) (Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755).

**FRANCK:** Symphonic Variations. **BACH:** Concerto for Harpsichord and Strings, No. 5, in F minor, S. 1056. **SHOSTA-KOVICH:** Concerto for Piano and Orchestra, No. 1, Op. 35. Maria Grinberg, piano; Moscow Radio Symphony Orchestra, Gennady Rozhdestvensky, cond. WESTMINSTER GOLD WGS 8325, \$3.98.

Fortunately, I have always liked the Franck symphony—and still do. even after this on-slaught.

Most to my taste is the reading by Andrew Davis. The talented young British conductor leads a well-paced, traditional sort of performance, gorgeously played by the New Philharmonia and reproduced with sonorous yet brightly distinct timbres. Davis seems to be gaining a measure of repose without in any way losing the kinetic. unaffected directness that first attracted me to his work a few years ago (leading the New York Philharmonic in Hindemith's Weber Metamorphoses and Berlioz' Fantastique). The musicians respond ardently to his direction, especially in the rapturously phrased Allegretto, and my only quibble (which may be too strong a word) is a slight loss of breadth and definition of rhythmic values in the Allegro non troppo sections of the first movement. This is another way of saying that Davis' account as yet does not quite project the nicety of specifics and probing eloquence of the very greatest interpretations of this work known to me-those by Monteux, Toscanini, Giulini, and Cantelli-but it ranks with the Martinon (MHS 1099), and indeed surpasses the worthy and rather similar Ormandy (Odyssey Y 33922), as the best allaround recommendation in current lists. The Fauré Pelléos et Mélisonde is civilized. affectionately shaped, and altogether touchingly played.

Antal Dorati's first recording of the Franck symphony reveals a wealth of detail and a thorough knowledge of the score. Indeed, that surety of design turns out to be more of a curse than a blessing: In this most mystical of works, his sureness of conception answers every question before it is even posed. Every counterpoint is revealed with X-ray clarity, every purposefully vague texture is brightened to the point of glare, every accent is made clear, and every tempo relationship is projected with an authority that leaves nothing to the imagination. As a result, the music is cut-and-dried, drained of color and emotion. It is the virtual antithesis of the bizarre Furtwängler account (reissued on London Treasury R 23207, April 1977), and while it has infinitely more textual validity, it proves equally disappointing.

Lorin Maazel's new recording is disappointing too, for he recorded a clearheaded, if perhaps overly objective, performance for DG in Berlin in the early Sixties. The Cleveland remake has more "personality," but not of the sort I would care to hear often. Many details specifically indicated by the composer are ignored with high-handed (and sometimes heavy-handed) disdain. and the result-notwithstanding all the mushy sensuality and "Romantic" gestures-is strangely stiff and emotionally uncommitted, with a soupy spinelessness taking the place of the former tautness and reserve. The orchestra plays beautifully. and the engineering is silky, forwardly miked, and clearly detailed.

All five performances of the Symphonic Variations have their points. A recommendation is happily facilitated by Angel's coupling of the idiomatic Ciccolini version with equally distinguished accounts of Les Djinns and the D'Indy Symphony on a French Mountain Air. Ciccolini's sound here has plenty of body and resonance, his articulation and pacing are brightly animated, and there is excellent rapport with both orchestra's and conductors (Paul Strauss and the Orchestre de Liège in the Franck works. Serge Baudo and the Orchestre de Paris in the D'Indy). Angel's encoded quad disc has cushioned richness without any serious loss of detail.

The Von Alpenheim/Dorati Variations is rather more successful than Dorati's coupled account of the symphony. The tightly maintained rhythms and rigorously clarified details work better here—helped by Von Alpenheim's authoritative and richly sonorous playing. I particularly admire the bracing, bobbing way her slightly deliberate pacing of the final part interacts with the comments in the orchestra. In its way, this unorthodox interpretation is as distinguished as the Ciccolini.

The young American pianist Mark Westcott also favors an unprettified, athletic approach to both the Symphonic Variations and Les Djinns, but he lacks the refinement of tone and technique heard from the others. The really attractive item on the MHS disc is Paul Freeman's firmly contoured Les Eolides—high praise indeed from a reviewer whose principal experience with this tone poem comes from many incandescent Toscanini performances. (Sadly he recorded neither Les Eolides nor the symphony commercially.) The MHS engineering is close up and impactive without sacrificing color or dynamic range.

The Russian Maria Grinberg gives the fastest account of the Variations I can remember hearing. Some may fault her for a lack of introspection, but I like her impulsive and, in its way, grandly inflected pianism. Much harder to accept is the drab ensemble that accompanies her. It is positively elephantine in the Bach concerto (surely a musician of Gennady Rozhdestvensky's caliber should know better than to employ this full, rumbling complement of strings), and the blatty, vibrato-ridden trumpet soloist in the Shostakovich concerto is not very attractive to hear.

In his recording of the Variations with Maazel, Pascal Rogé plays, as he has in some previous recordings, with a pearly beauty of tone that ends up sounding bland and undercharacterized. Nor am 1 especially fond of London's typical soft-focus piano reproduction. H.G.

GIORDANO: Andrea Chénier. For an essay review, see page 71.

HANDEL: Aires and Arias—See A. Scarlatti: Sule sponde del Tebro.

Hayon: L'Infedeltà delusa.

Vespina	Magda Kalmar (s)
Sandrina	Juha Paszthy (s)
Filippo	Istvan Rozsos (I)
Nencio	Attila Fulop (t)
Nanni	Józset Gregor (bs)

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Baroness Irene	Kari Lovaas (s)
Count Errico	Claes H. Ahnsjö (t)
Marquis Ernesto	Anthony Rolfe Johnson (t)
Masino	Domenico Trimarchi (b)
Villotto Villano	Wladimiro Ganzarolli (bs-b)

Lausanne Chamber Orchestra, Antal Dorati, harpsichord and cond. [Erik Smith, prod.] PHILIPS 6703 077, \$23.94 (three discs, manual sequence).

In the booklet that accompanies La vera constanza, its conductor. Antal Dorati, tells how the team, after having been overwhelmed by the discovery of La Fedeltà premiata-the first opera in the Philips Haydn-opera series (6707 028, June 1976)felt that they now knew what to expect, and "set about our work more calmly." And how that calmness did not last: "Within the first forty-eight hours we were spellbound 'captives' again, grateful recipients of miracles."

Haydn operas have that effect on anyone who gets to know them well. There are just two things to be said against them: They are not by Mozart; and, in the words of the prima donna Faustina when she first encountered Rameau, they "reek of music." They are not thin-textured, swift-moving, uncomplicated, unexacting scores of the kind with which Cimarosa, Paisiello, and Sarti won easy acclaim, but connoisseurs' pieces in which each long aria is a carefully and elaborately worked symphonic movement.

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CIRCLE 19 ON READER-SERVICE CARD

raries Haydn added richness of form, development, harmonic movement, and texture; in the process, he sacrificed their simple theatrical effectiveness. Although several of the operas have been revived with success in our day, exaggerated claims are often made for their stage merits. It is for their music that we love them. The scores are a treasure trove of movements witty, lyrical, affecting, funny, passionate, exquisite-compositions for voice and orchestra, both used with mastery, which make wonderful music around an emotion, a character, a situation.

L'Infedeltà delusa (1773) was the first opera l ever translated, and over the years I have got to know it well. It is probably the most stageworthy of all the series. The libretto is a burletta per musica; there is a simple buffo plot, easy to follow, with just two pairs of lovers and a testy, ambitious father. The resourceful Vespina, by assuming the disguises—and voices—of a wheezy old woman, a lusty German servingman, a foppish aristocrat, and a notary, outwits that father's attempts to divert the path of true love.

The Hungaroton performance was recorded in Esterháza-not in the opera house itself, which is no more, but in the great hall of the palace. The piece is given entirely uncut, after the text edited by Dénes Bartha and Jenö Vécsey in the Henle complete Haydn edition. The overture has its concert ending. (In the "opera version," the second movement modulates to a cadence leading directly into the opening ensemble.) As prelude to the second act, a C major Prestissimo associated with Symphony No. 63, La Roxolane, is introduced, as suggested by Robbins Landon in his edition of L'Infedeltà.

A young cast sings in good style, and runs easily through the extreme ranges that Haydn demanded of his singers. But these interpreters compete in vain with memories of Jennifer Vyvyan or Eugenia Ratti as Vespina, Hugues Cuénod or Ugo Benelli as Nencio, Jill Gomez as Sandrina, Alexander Young as Filippo. They lack personality, individual temperament and character. In this performance, the numbers of L'Infedeltà seem to be inordinately longwinded and the recitative (Act II starts with eleven pages of it) grows tedious.

Recitative in recorded performances is always a problem. To pitter-patter through it, making little of the words, kills it. The Hungarian cast does not do that, but it goes to the other extreme, making so much of every inflection that things proceed at a snail's pace. It's done with accomplishment. Júlia Pászthy, as Sandrina, ordered by her father to answer every one of her lover's questions with a "no," gives those "no"s amusingly different colors to accord with her real feelings. Impersonating an old woman, Magda Kalmár produces an extraordinary repertory of whines and wheezes-and still manages to sound Haydn's notes precisely. In the theater, all might be well. The recitatives give the singers their chief chance to act. I have a tape of the British stage premiere of L'Infedelto, in which the (abridged) recitatives are accompanied by ripples of audience mirth and often punctuated by bursts of laughter. But here they drag.

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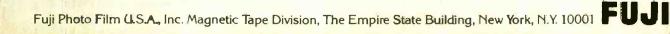
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ic Performance



Renormance

Klaus Hennch/Phonogr

Sándor's tempos is a shade too slow. Everything is too relaxed. In Nanni's F minor "vengeance" aria, for example, József Gregor altogether misses the thrust of some 6/8 cross-accenting within the 3/4 meter. The orchestral playing lacks energy and liveliness. Woodwinds are too backward, and the bass is too light. (The ensemble rests on a single double bass; Haydn, at any rate in the 1775 painting of an Esterháza performance, used two.) In sum, a tidy but insufficiently buoyant or pointed account of the opera; on my tape, it sounds like a different work. There is a good essay by László Somfai, in which I would quarrel only with his characterization of my favorite aria in the whole piece, Sandrina's "E la pompa un grand'imbroglio," as "mawk-This limpid, lyrical number is perish " fectly placed between comedy scenes and the lively finale in which all the knots are merrily tied.

According to Haydn's earliest biographers, La vera costanza was composed for Vienna, but withdrawn. Horst Walter, who has edited the score for the Henle complete edition, denies this-but for reasons that, as set out in his foreword, seem to me insufficient. All that his evidence establishes for certain is that, for the Esterháza premiere (1779), there was rewriting. But is it true to say that "all indications point to Esterhaza"? The first singer of Masino was Leopold Dichtler, who created a long series of high tenor roles, from Apollonia in La Cantarina (1767) to Clotarco in Armida (1784); yet the role of Masino lies so low that in the recording it is easily compassed by the baritone (or bass-baritone) Domenico Trimarchi. From the range of Dichtler's other parts, it is evident that he could sing it all right; but surely it cannot have been written expressly for him.

The autograph of Costanza probably went up in the fire of 1779; the main source is a score, largely autograph, now in Paris, probably written out for the 1785 revival: and insofar as this contains new music, it is Haydn's last music (insert arias excepted) for the Esterháza stage. It is a more highly developed opera than L'Infedeltà, closer to La Fedeltà premiata. The second-act finale, which runs for fifty-nine pages of score, is possibly Haydn's longest-and is an exciting stretch of music. The plot is no more than a dreary buffo round of misunderstandings-the least interesting that Haydn ever tackled. And yet the opera had some success; by 1792 it had been played in Pressburg, Budapest, Vienna, Paris, and Brno. Another setting, by Pasquale Anfossi, also made the European rounds.

One of Anfossi's numbers, an accompanied recitative followed by an aria, for Errico, is included in Haydn's score. It is a rather beautiful piece with a flowing melody. It is followed by an accompanied recitative and aria, for Rosina, of Haydn's own composition. The composer seems to have intended a confrontation. Anfossi's piece stays firmly in F. making no excursions farther from home than the dominant, and its figuration is conventional. Haydn's is harmonically adventurous, and unconventional. The accompagnato is in A; the aria is in E, but instead of coming to a formal close it passes back into recitative. and closes in A flat!



Antal Dorati and the Lausanne Chamber Orchestra Communicating the conviction that Haydn's La vera costanza is marvelous music

Rosina and Errico are the principal figures; she has three arias and he two, and they sing two duets, one of them imbedded in the second finale. Jessye Norman sings Rosina (the role, at least in part, was composed for Haydn's new Italian prima donna, Barbara Ripamonti) flexibly and in warm beautiful tones. She is "expressive" but in a somewhat generalized way. The Errico, Claes H. Ahnsjö, a Swedish tenor with the Munich Opera, is clean and accurate; he phrases well, though there is nothing specially distinguished about the timbre. In fact, there are no remarkable individual performances to set beside those of Ileana Cotrubas, Frederica von Stade, and Luigi Alva in La Fedeltà. But the general level is consistently high and the general effect is lively.

Dorati conducts with feeling for both details and structure, and he communicates his conviction that this is marvelous music. The orchestra is alert. Playing the continuo himself, Dorati, without ever becoming too fussy, gives it some imaginative touches. Recitatives are accompanied by cello and double bass as well as harpsichord. (In L'Infedeltà there are just plain harpsichord chords.) In accompagnato, Dorati, rather oddly, often refuses to allow voice and orchestra to overlap, and in several phrases delays chords that should surely enter with the singer's final note. Too many appoggiaturas are missing. No. 26, a Villotto aria, is taken at slightly too fast an adagio. I feel, for the beautiful and complicated figuration to make its full effect; but then it is a long aria. All in all, this is as well conducted an account of a Haydn opera as one could hope to hear. The recording is bright, but not perfectly clean. "Added resonance"?

The Robbins Landon edition is used, which differs in several details from the Henle score. For some reason, Rosina's first aria has been shifted to the penultimate position in the first act. The recitatives are abridged (I'm not going to make a fuss about that), and there are a few small, unimportant cuts, such as a burst of coloratura in Errico's first aria.

La vera costanza is not top of my list of Haydn operas, but it's something not to be missed. Orlando Paladino is due next in the Philips series. And eagerly I await L'Isola disabitata [scheduled for recording this past May-Ed.], which, in score, seems to me one of the most beautiful of all; and Armida, whose final act is one of Haydn's highest achievements. These Philips recordings are made in association with the Radio Suisse Romande and the European Broadcasting Union. In 1968, the West German Radio mounted a studio performance of Armidu that had Gundula Janowitz and Waldemar Kmentt in the leading roles, and the further distinction of being accompanied by the eighteenth-century instruments of the Cappella Coloniensis. 1 wish Philips would consider using an authentic orchestra. Else, one day, it may find that its recordings are superseded in the way that all previous Bach cantata recordings were when Das alte Werk got to work. A.P

**D'INDY:** Symphony on a French Mountain Air—See Franck: Symphony in D minor.

LABATE: Oboe Works. René Prins, oboe; Walter Wollman, piano. [Daniel Nimetz, prod.] MUSICAL HERITAGE MHS 3534, \$4.95 (\$3.50 to members) plus 95¢ postage. Tape: MHC 5534, \$6.95 (\$4.95 to members) (Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755).

Bruno Labate (1883-1968) is fondly remembered by veteran concertgoers and discophiles as the superb first oboist of the New York Philharmonic (and an outstanding "character" among that organization's galaxy of stars) over a twenty-four-year period beginning in 1919. But to oboe teachers and students he is also known as the composer of many recital and teaching piecesa repertory now represented on records for the first time, to the best of my knowledge. Only one of these works is of considerable substance: the virtuoso-display Concertino of 1946. The rest are salon miniatures of the old-fashioned genre type, most of them designed to develop specific technical executant skills but with their pedagogic pills beguilingly sugarcoated. The titles of the present twelve examples are characteristic in both senses of that term: Sunset, Pastorale, Barcarolle, Seguidilla, The Dancing Doll. Tarantella, etc.

What neither the descriptive titles nor the frank salon nature of this music suggest is the insidiousness with which Labate's ingenuous melodism and ingeniously arabesqued passagework are spiced with uniquely oboistic piquancies and pungencies. And it is just these sonic sauces that are stressed by young René Prins. whose mildly bittersweet, cleanly focused timbres avoid both excessive nasality and unctuousness. He plays with admirably controlled, graceful dexterity-a bit too carefully, perhaps, and with less panache than the showpieces demand, but all the better for this novel program's use as either instructional paradigms or simply delectable easy listening.

Pianist Walter Wollman (Prins's colleague on the musical faculty of the State University of New York at Oneonta) is an assured collaborator rather than subservient accompanist, and both instrumentalists are recorded with ungimmicked, nottoo-close but nevertheless vivid presence. R.D.D.

#### LEONI: The Prayer of the Sword (incidental music); L'Oracolo:

Ah-Yoe	Joan Sutherland (s)
Hua-Qui	Huguette Tourangeau (ms)
San-Lui	Ryland Davies (1)
Soothsayer	lan Caley (1)
Chim-Fen	Tito Gobbi (b)
Win-Shee	Richard Van Allan (bs)
Hu-Tsin	Clifford Grant (bs)
<b>Finchley Children</b>	n's Music Group, John Alldis
Choir, National	Philharmonic Orchestra,
Richard Bonyng	e, cond. [John Mallinson,
prod.] LONDON	OSA 12107, \$15.96 (two
discs, automatic	sequence). Tape: 👀 OSA5

Antonio Scotti's reputation as a first-rate singer can easily be substantiated through his many fine 78s. His universally praised skill as an operatic actor, on the other hand, has to be taken largely on faith. Or. rather. had to be taken on faith. For with this first recording of L'Oracolo, one of his most celebrated assignments. we finally have some powerful, if indirect, evidence of his effectiveness as a stage personality. Scotti's contemporaries seem to agree that the baritone was singularly fascinating as Chim-Fen, the unsavory keeper of an opium den in San Francisco's Chinatown. He must have been. Indeed, I would go so far as to say that the fact that he could keep the opera in the Met's repertoire for some forty performances between 1915 and 1933 is the clearest evidence we have of his interpretive genius.

L'Oracolo, mind you, commands one's respect. It is not a shoddy piece of work. Like Puccini, his senior by six years. Leoni was a pupil of Ponchielli at the Milan Conservatory, and the training shows. The word setting is skillful, the musical pacing is adroit, colorful touches are effectively applied, a sense of theater pervades the

work. Interestingly enough, though, unlike Puccini, Leoni makes no effort to create any specifically topographical atmosphere. For all the opera's exotic stage setting-Hatchet Alley in San Francisco on the first day of the Chinese New Year, complete with parades and celebrations-L'Oracolo could just as well take place in Livorno or Messina so far as the music is concerned.

The real problem with L'Orucolo is that Leoni's score is neither personal enough nor imaginative enough to infuse the melodramatic plot with the kind of poetry or passion that might override our scruples. The love music for Ah-Yoe and San-Lui displays a kind of pallid competence, but there is nothing here or elsewhere to set the pulse racing. In 1915 Henry Krehbiel characterized the music as "Puccini and water," and so far as I'm concerned the assessment still stands. The dramatic passages are energetic without being lively, the lyrical passages are emotional without being passionate. Nothing could make clearer the genuineness of Puccini's gifts than L'Oracolo.

Much about this performance is good. Richard Bonynge is full of animation, and his chorus and orchestra are very capable. There is some excellent solo violin playing by, Lassume, Sidney Sax, concertmaster of the National Philharmonic. Joan Sutherland sings her music sweetly. Ryland Davies as her lover has his moments (though he sounds constricted whenever the music takes him to the top of the staff). Clifford Grant is sonorous, especially in sustained passages.

Tito Gobbi, above all, is a vivid Chim-Fen. expressive in his enunciation of the text and remarkably firm of voice for all his sixty years. Unfortunately, although Chim-Fen might easily dominate the stage action. the longest role in the opera, one soon discovers, belongs not to him, but to Win-Shee, the seer who in the final scene brings Chim-Fen to justice by burying a hatchet in the side of his neck and then strangling him slowly on his own pigtail. As Win-Shee. Richard Van Allan is in my opinion thoroughly unsatisfactory, being so vocally mushy (and even unsteady) that hardly a vestige of drama or characterization succeeds in making itself felt through the tonal murk.

The fourth side is devoted to music Leoni wrote for a blank-verse drama by James Bernard Fagan in 1904, though why the score is referred to as "Reminiscences of the Music" is not explained in the accompanying notes. Like L'Oracolo, The Prayer of the Sword has a rather vapid, though facile, charm. All in all, an adventurous endeavor but not a consequential one. Italian-D.S.H. English libretto. Fine sound.

MONTEMEZZI: L'Amore dei tre re. For an essay review, see page 67.

MONTEVERDI: Vespro della Beata Vergine. Elly Ameling and Norma Burrowes, sopranos: Charles Brett, countertenor; Anthony Rolfe Johnson, Robert Tear, and Martyn Hill, tenors; Peter Knapp and John Noble, baritones; King's College Choir (Cambridge), Early Music Consort of London, Philip Ledger, cond. [Christopher Bishop, prod.]

ANGEL SB 3837, \$15.98 (two SQ-encoded discs, automatic sequence).

Comparison: Schneict/Regensburg Cathedral Choir Arch. 2710017

Surveying the discography of Monteverdi's Vespers in May 1976, I gave my nod to the newly released Schneidt recording on Archiv, which combined authenticity and style of performance with a presentation that seemed most in keeping with Monteverdi's plan for the work. That three-disc set, however, contained the whole of Monteverdi's 1610 publication, including an alternate setting of the Magnificat and the Missa In illo tempore. While both these works were well sung (though the Magnificat soloists are weak) and worth hearing. they brought the price of the package up considerably. Now, after listening to this new recording directed by Philip Ledger, 1 am pleased to report that Angel has produced a highly recommendable two-disc Vespers with spectacular sound, elegant singing, and a dynamic concept of the work that should delight any prospective buyer.

Ledger and Denis Arnold, who collaborated on the performing edition used for the Vespers, choose to regard the vocal chamber pieces that appear between the massive choral frescoes of the Vesper psalms as genuine antiphons intended to introduce the psalms to which they are attached. At first these antiphons seem calm, as witness the exquisite solo "Nigra sum" and the peaches-and-cream texture of "Pulchro But soon the momentum begins to build, from the incredibly florid tenor trio "Duo Seraphim" through the powerful cross-rhythms of "Nisi Dominus" to "Audi coelum," an antiphon unable to contain itself. At the words "omnes hanc sequamur" the chorus bursts in, with its corporate support leading to a finely stirring climax.

But this is still only an introduction to the major part of the Vespers, and it is hard to see how Ledger will continue this mighty crescendo. His solution is a Bernsteinian explosion that sets "Lauda Jerusalem" going like a gospel choir gone wild. From here on there is no stopping the piece until we reach the rainbow sonorities of the final Gloria and the mighty cadential rhythms of the "Sicut erot" that conclude the Magnificat. The sound, under engineer Robert Gooch, is worthy of the performance, and the record sequence is, praise be, automatic. This is a recording of Monteverdi for Bruckner fans and Strauss nuts as well as baroqueniks, who may be surprised at the similarities between these apparently remote composers.

The King's College Choir, currently one of the best around, sings brilliantly, and the instrumental ensemble of obbligato violins and cornetti and mixed continuo is splendid. Unfortunately, the liner notes, which are minimal, do not clarify the constitution of the "full orchestra" drawn from David Munrow's Early Music Consort, which accompanies the multiple-voice psalm settings.

The soloists are superb; England seems to provide fertile soil for the development of singers skilled in this repertoire. Yet another astonishingly gifted tenor. Anthony Rolfe Johnson, emerges on this album. His impeccable phrasing and elegantly turned

12107, \$15.90.

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ornaments are best heard at the beginning of "Audi coelum" and in the "Deposuit" section of the Magnificat. Ledger also employs women soloists to good effect. Elly Ameling and Norma Burrowes are able to sing a more suitably relaxed "Pulchro es." for example, than was possible for their falsetto counterparts, Paul Esswood and Kevin Smith, on Archiv, and in the solos of the choral movements there is no comparison between the Angel singers and the boys heard in the Archiv recording. Charles Brett's alto is excellent; he is fast developing as a most reliable singer in this surprisingly competitive field. Tenors Martyn Hill and Robert Tear are known quantities: the latter is particularly fine in the passionately restrained declamation of "Nigra sum" Baritones Peter Knapp and John Noble are both robust and supple.

The recording, which is quad-encoded, sounds marvelous even in normal stereo.

PURCELL: Come ye sons of art; Love's goddess sure. Norma Burrowes, sopranc; James Bowman and Charles Brett, countertenors; Robert Lloyd, bass; Early Music Corrsort of London, David Munrow, cond. [John Willan, prod.] ANGEL S 37251, S7.98 (SO-encoded disc).

Come ye sons of ort is such an irresistibly rollicking piece that it is bound to pick up even the dullest spirits. The only recording currently in SCHWANN is the old Deller one, which I have long enjoyed for want of another, though the sound is weak and the second half of the piece is an anticlimax in the performance. The new Angel is infinitely superior, and if you like this kind of music (and who can fail to?) Fadvise you to run out and buy it al once.

Countertenors James Bowman and Charles Brett, a splendid pair in the justly famous duct "Sound the trumpet," divide the two solos, with Bowman predictably excellent in the title song and Brett elegant in the cheerful melody "Strike the viol," which unfolds over one of Purcell's relentless ground basses. In this performance the second half of the ode is a worthy counterpart to the first. Norma Burrowes weaves an elastic line around the obbligato oboe of "Bid the virtues," and Robert Lloyd deals heroically with the bass coloratura of "These are the sacred charms." A rousing chorus finally assures us that "Nature rejoicing has shown us the way/with innocent revels to welcome the day.

Two years before Come ye sons of art, Purcell celebrated the queen's birthday with Love's goddess sure, another multimovement'ode. After a rather weak beginning, the piece picks up with a ground on one of Mary's favorite popular tunes, "Cold and raw," and continues with an absolutely infectious duet for two countertenors, "Many fine days," concluding with a chorus highlighted by a section for solo quartet that Edward Dent likened to the most sublime moments in Dido and Aeneas.

Come ye soos of art features a full orchestra, while Love's goddess sure employs a smaller ensemble. Many of the twentyseven instrumentalists are familiar from other Munrow recordings, among them the dynamic duo of the continuo. Christopher Hogwood and Oliver Brookes. Like the orchestra, the thirteen-voice chorus is starstudded. Any conductor who can marshal a tenor section of Paul Elliott. Martyn Hill, and Rogers Covey-Crump is fortunate indeed. This was one of Munrow's few conducting forays into the later baroque literature, and he seems as confident as he always was with the earlier repertoire. EMI producer John Willan has delivered appropriately fine sound in compatible stereo/quad, and the package is handsome. S.T.S.

RAVEL: Bolero-See Debussy: Nocturnes.

SCARLATTI, A.: Su le sponde del Tebro. HANDEL: Aires and Arias. Judith Blegen, soprano; Kenneth Cooper, harpsichord; Columbia Chamber Ensemble, Gerard Schwarz, trumpet and cond. [Thomas Frost, prod.] Co-LUMBIA M 34518, S7.98.

HANDEL: A choice Sett of Aires: Overture, Allegro; Bourëe; Aire; March, Alessandro: Lusinghe plù care, Atalanta: Care selve, Samson: Let the bright seraphim.

A thoroughly engaging record. Su le sponde del Tebro is a charming chamber cantata, a pastoral in which the shepherd Aminta bemoans the loss of Clori's love in a series of recitatives and arias. Though the work evinces a certain psychological progression from Aminta's opening lamentation to his final acceptance of defeat, the result is not so much a miniature drama as an extended study in emotional and musical moods. The Handel side, on the other hand, is a miscellany that seems to have been devised simply to provide pleasurable listening: a varied group of arias, interspersed with orchestral pieces from A choice Sett of Aires, published in 1733. Apart from "Eternal source of light divine." a solemn and ceremonial ode written for Queen Anne's forty-eighth birthday in 1713, these arias are among Handel's most celebrated (and inspired) achievements in this field.

Gerard Schwarz conducts the virtuoso instrumental ensemble with exemplary musical command, allowing for a judicious amount of decoration (much of it, according to the jacket copy, improvised) in recitatives, second verses, and repeats. Schwarz's trumpet playing, it will hardly come as a surprise to learn, is first-rate, too. At times, indeed, it is exhilaratingly brilliant. The harpsichord continuo by Kenneth Cooper is also outstanding.

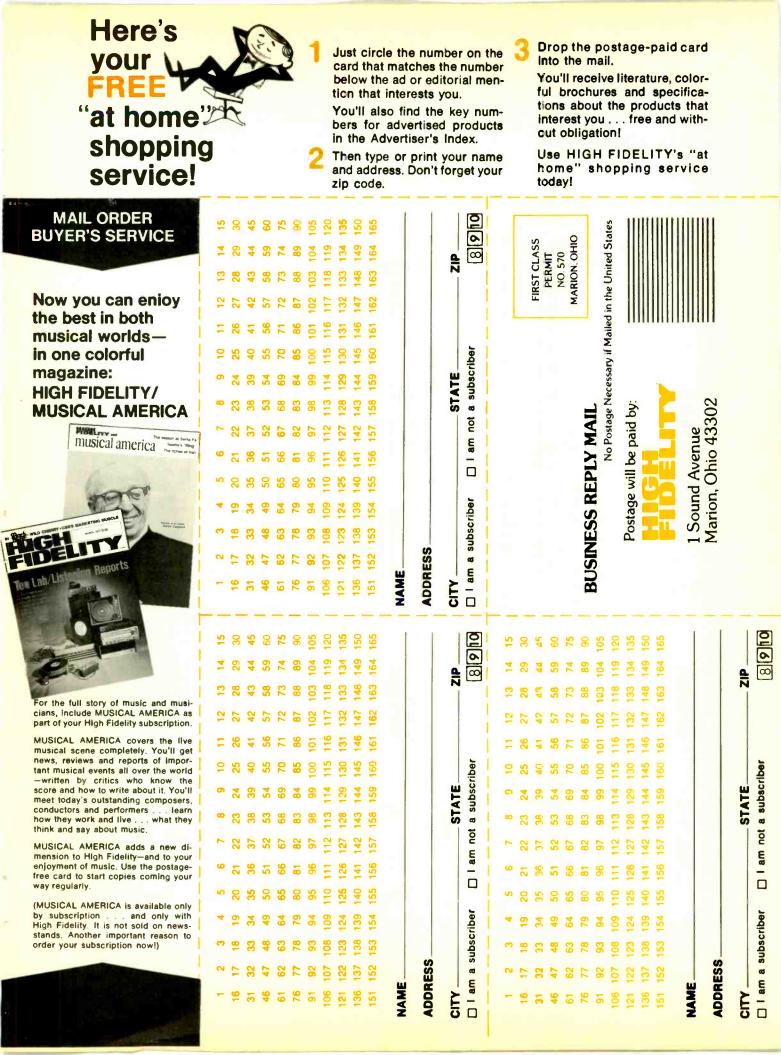
Judith Blegen's contribution to this disc, an important one, is highly attractive. She is a musical-and intelligent singer, a light soprano whose reach extends well beyond mere bright chirpiness, as witness the suitably darkened tone she puts to such effective use in the more reflective sections of the Scarlatti cantata. She is not yet quite as technically well grounded as she might be. however: At times the tone turns impure (the wonderfully sudden octave rise on 'mio cor" in "Care selve" is for this reason less ravishing than it should be): her trill. which varies a great deal in quality, mostly lacks adequate definition, no light matter in music of the eighteenth century; and she has a tendency to drop troublesome conso-

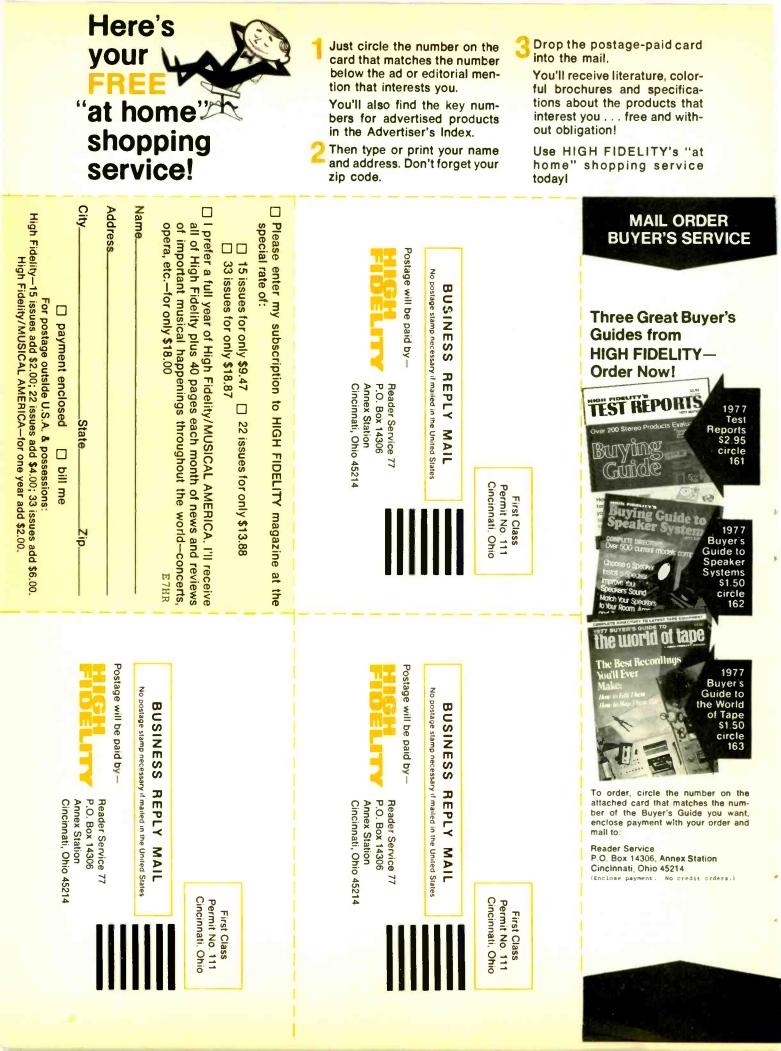
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nants (e.g., "speron[t]e" or "bea[t]e"). But her manner is refreshingly direct, even spontaneous, and like her fellow musicians she gives on this occasion a good deal of pleasure. D.S.H.

SHOSTAKOVICH: Concerto for Piano and Orchestra, No. 1—See Franck: Symphony.

TCHAIKOVSKY: Serenade for Strings—See Dvořák: Serenade for Strings.

VERDI: La Forza del destino. For an essay review, see page 71.

#### WAGNER: Der fliegende Holländer.

Senta	Janis Martin (s)
Mary	Isola Jones (ms)
Erik	René Kollo (t)
Steersman	Werner Krenn (t)
Dutchman	Norman Bailey (b)
Daland	Martti Talvela (bs)

Chicago Symphony Chorus and Orchestra, Georg Solti, cond. [Ray Minshull and Michael Woolcock, prod.] LONDON OSA 13119, \$23.94 (three discs, automatic sequence). Tape: CO OSA5 13119, \$23.85.

WAGNER: Die Walküre (sung in English).

Brünnhilde	Rita Hunter (s)
Sieglinde	Margaret Curphey (s)
Fricka	Ann Howard (ms)
Siegmund	Alberto Remedios (t)
Wotan	Norman Bailey (b)
Hunding	Clifford Grant (bs)

English National Opera Orchestra, Reginald Goodall, cond. [John Mordler, prod.] ANGEL SELX 3826, \$40.98 (five discs, manual sequence) [recorded at performances, December 18, 20, and 23, 1975].

The newest Dutchman has one distinction: Of the nine recordings to date, it is the only one that gives no real idea of the opera, the only one in fact that has nothing to recommend it—with the lone exception of an excellent background essay by the late Deryck Cooke (presumably one of the last things he wrote).

At that, the recording improves on the disastrous concert performances that preceded it. Here the brasses are under some control, avoiding the hideous overblowing heard at least in New York (under Solti's baton, a trombone can be a dangerous weapon), and the conductor's shaping of the score occasionally spans whole measures, a major improvement over the onedamned-note-after-another Carnegie Hall performance. In addition, several singers are heard to marginally better advantage under controlled studio conditions; the end of the Act I Dutchman/Daland scene, for example, is almost tolerable, and at its climax (the rising of the south wind) Solti musters the performance's one moment of uplift-lasting exactly four bars, at which point Werner Krenn's puling "Südwind! Südwind!" forces us back to reality

For the most part Solti simply plods through the bloody thing, varying only the noise level. His occasional efforts at "interpretation" are even less happy. While the swoony little string figures that accompany Daland's entrance with the Dutchman in Act II have been brought under control (I've never heard any conductor botch them as badly as he did in New York), the Act III Sailors' Chorus remains ludicrous: By pacing it well below Wagner's metronome marking, phrasing it with superponderous, galumphing accents, and summoning huge, bloated playing and singing, he turns the whole scene into some sort of phantasmagorically distorted Mahlerian apotheosis. (The marking, after all, is "onimoto, mo non troppo allegro," and the tempo has to be danced to.) The splendid Chicago Symphony Chorus is thereby wasted, producing a big, rich sound of no discernible relevance to the business at hand.

The best that can be said of the cast is that Janis Martin's voice begins to focus in the Act II duet with the Dutchman, which moves slowly enough to allow her time to "set" for most notes. But the broad middle of the voice is so uncertainly produced (in switching from mezzo to soprano she seems to have lost reliable control of that octave or so, which of course is a fundamental component of both ranges) as to allow almost no mobility: the Ballad is a jumble. If we have had no really well-sung Senta on records, at least a number of them-Leonie Rysanek (Dorati/London). Astrid Varnay (Richmond), Marianne Schech (Konwitschny/Angel), and Annelies Kupper (Fricsay/DG, deleted)-have compensated with some command of the role.

The weak upper part of Norman Bailey's baritone is handicap enough in the "normal" Heldenburiton parts (Wotan and Sachs): the Dutchman's killing tessitura also cruelly exposes the dry, throaty quality of the lower reaches (though his lowest notes still sound better than Martti Talvela's), not to mention his virtual inability to sing legato. Only one recorded Dutchman has fully encompassed the role's vocal demands: Franz Crass (on the 1961 Philips Bayreuth set, never released domestically). significantly a bass with an extraordinary upper extension. I doubt that the music has ever been better sung, in purely vocal terms (allowing for some odd tempo jerks dreamed up-or at least sanctioned-by conductor Sawallisch): for Crass alone 1 hope the set may someday be made available here. (It was recently reissued in Germany, and some copies have turned up hereabouts.) Among the baritone competition, there is an outstanding job by Josef Metternich (in the Fricsay/DG set). intelligently and firmly voiced, and all of the others except Bailey manage to project something of the part.

René Kollo should-and could-be a fine Erik, but his technique is now so settled into that constricted, leathery sound that one listens in vain for any lyric qualities: 1 never expected to pine for the "good old days" of Rudolf Schock (Konwitschny/Angel) and Karl Liebl (Dorati/London). And Martti Talvela's muffled, slithery, often wordless production reduces Daland virtually to a chorus step-out, which he indeed sounds in the opening scene (except that the Chicago chorus probably contains half a dozen or more basses who can sing the music better). Even his largely ineffective but moderately sonorous performance with Klemperer was better than this one.

Krenn's Steersman merely leaves a hole in the performance, for he seems to have recovered from the indisposition that rendered him an active irritant in the New

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York performance. But surely Solti could have found numerous young tenors better equipped to cope with the role's relatively modest demands. Krenn is not the worst Steersman on disc (Philips' Georg Paskuda is apt to rebuff all challenges in that department for a long while), but he falls well short of the solid performances of Ernst Häfliger (Fricsay/DG). Josef Traxel (Richmond), and Gerhard Unger (Klemperer/Angel), not to mention the really fine ones of Fritz Wunderlich (Konwitschny/Angel) and Harald Ek (Böhm/DG). Isola Jones's Mary makes little impact one way or the other.

But surely, you are probably thinking, the Chicago Symphony counts for something. Not to my ears. There is some attractive woodwind solo work (of minor importance), but otherwise the playing isn't even particularly distinguished, and the players disclose no close knowledge of or involvement with the music. The result is in no way comparable to the Boston Symphony's substantial contribution to RCA's Lohengrin, partly because the BSO's playing was so good, but also because Dutchmon depends more on orchestral intensity than on sheer virtuosity (though the latter would be welcome too). While it would be lovely to hear the swirling string motifs that depict sea and wind played with real precision (the Chicago players don't come close). Wagner's effect doesn't depend on that: Played with a real sense of motion, as those figures are on the other recordings, they communicate; here they fall flat. It's a pity this recording wasn't made with the Vienna Philharmonic, which plays Wagner regularly and powerfully: Solti's Dutchman only reinforces my suspicion that the success of his other recorded Wagner interpretations owes more to the orchestra (and the stronger casts, of course) than to him.

No Dutchman recording is without serious flaw, but the two with which I would most happily live are the high-voltage Fricsay (which resurfaced recently as a German Heliodor reissue, worth searching out) and the weightier, highly atmospheric 1955 Keilberth/Bayreuth (Richmond SRS 63159). Somewhat better sung over-all are the Konwitschny (Angel SCL 3616) and the Dorati (London OSA 1399) sets, but they tend to sobriety and somnolence, respectively. More interestingly conducted, but on the whole less interestingly sung, are the 1971 Böhm/Bayreuth (DG 2709 040) and the Klemperer (Angel SCL 3730) sets: Böhm has plenty of drive, as well as Karl Ridderbusch's splendid Daland (and Ek's Steersman), while Klemperer, predictably broad but still amply propulsive, makes the opera work with a cast little better endowed than Solti's.

Angel's live recording of the English National Opera's Walküre makes a startling contrast with the Solti Dutchman. For one thing, the ENO orchestra has it all over the Chicago Symphony: Reginald Goodall shows what a great Wagner conductor can accomplish working closely with a dedicated orchestra of lesser caliber. With his extraordinarily long-breathed conception, his unmatched appreciation of Wagner's lyric brilliance, and his marvelous ear for textures (among today's other Wagner conductors, only Karajan and Kubelik show much interest in the sheer beauty of the writing), Goodall coaxes from the ENO orchestra playing of remarkable purposefulness. You won't mistake it for the Vienna or Berlin Philharmonic, but it does convey the power and beauty of Goodall's immense conception. Andrew Porter has judged him the day's greatest Wagner conductor, and his records—listened to with the concentration they deserve—leave me in forceful agreement. I hope that a complete Götterdämmerung, so far stalled by union and other problems. soon makes it to disc—and then, please, a Meistersinger.

The singers who came to prominence in Goodall's Sadler's Wells/ENO Wagner performances, now active in all the world's leading theaters, have expressed unusual devotion to him, and their performances with him do suggest a special affinity. Bailey, for one, sounds like another singer altogether, delivering a rather distinguished Wotan. (It may be, though, that the Walküre Wotan is one role that he has fitted to his voice; I found his Met performances this season quite satisfying.) Rita Hunter sings an exceptionally beautiful Brünnhilde; how many Brünnhildes have commanded the melting warmth to make something unforgettable of the Act II question to Wotan, "wer bin ich, wär ich dein Wille nicht?" (or. in the Porter translation used here. "who am I, if not your will alone?")?

Like most Sieglindes, Margaret Curphey lacks power below the break (where the role makes inconsiderate demands), but she is otherwise first-rate. If Alberto Remedios and Ann Howard are light-voiced for their assignments, both sing impressively and intelligently: I am delighted that the stinging intensity of Howard's Wulkure Fricka (the more extended and varied Rheingold Fricka doesn't permit her to concentrate her resources so effectively) comes through on disc, even if one is deprived of her stunning physical presence. Clifford Grant is a strong Hunding, though his menace is not enhanced by Goodall's broad tempos or by the softer-grained sounds of the English text. The Porter Ring translation, whose other installments have been amply praised in these pages, is again impressive, even with the compromises necessitated by the special linguistic problems of Walküre.

This Walküre, it should be noted, is (like the earlier Rheingold, SDC 3825, April 1976) a British import, and it sounds it—with clearer, sharper, and fuller textures than the normal Angel product. I'm not sure I would want this as my only Walküre, but it is a recording of uncommon distinction.

K.F.



DAVID MUNROW: The Art of the Netherlands. Early Music Consort of London, David Munrow, cond. [John Willan, prod.] SERAPHIM SIC 6104, \$11.94 (three discs, manual sequence).

David Munrow's short career continues to flourish as, a year after his death, records made in the previous couple of years continue to pour from the record companies.

State

The boldness of this current set, which surveys the whole of the High Renaissance, is even more striking when one remembers that the thirty-three-year-old conductor and recorder virtuoso had already challenged the earlier repertoire with a similar three-disc survey of the Gothic era from Léonin to the fourteenth century (Archiv 2710019, July 1977) and before that had produced yet another set devoted to Machaut and his contemporaries ("The Art of Courtly Love." Seraphim SIC 6092, February 1977).

Munrow has left us a monumental vision of the span and diversity of Western art music from the inception of polyphony to its great flowering in the sixteenth century. His remarkable musicality and his ability to communicate his ideas to the talented group of colleagues who perform with him have resulted in so many magical performances that his influence will surely be felt in all areas of early music for many years to come.

In "The Art of the Netherlands." Munrow, always a fascinating program builder, put together four different vistas of the music that the great Flemish composers Ockeghem, Obrecht, Josquin, Isaac. and their contemporaries brought to Italy from their homeland at the close of the fifteenth century and the beginning of the next. New interpretations of familiar selections and fresh discoveries from the almost inexhaustible well of magnificent music are combined in his surveys of the motet, the Mass, instrumental music, and the secular song, which appears garbed in a fascinating variety of contemporary arrangements.

Some of Munrow's readings may surprise ears used to American performances colored by the sound of the old New York Pro Musica. A light and airy "Scaramella" leads off the first disc devoted to secular song, for example; followed by a languorously sensual performance of "Allegezmoi" sung by six solo voices. A sparkling arrangement of the Josquin chanson for two lutes provides a cheerful contrast. "El Grillo" and "Donna di dentro" are sung straight-none of the fantastic improvisational chirping from Josquin's cricket that has become de rigueur in this country. But Munrow's recorder can be heard to fine effect in an arrangement by Alexander Agricola of Hayne van Ghizeghem's lovely melody "De tous biens plaine." Imaginative scoring and the combination of several contemporary versions of a song allow Munrow to build long pieces from short ones. Barbireau's charming song "Ein frölich wesen," for instance, appears five times, first in its delicate original form for three parts (played first on recorder. lute. and viol), and then sung. A florid version for the buzzy regal follows, concluding with Obrecht's more robust four-part setting, first for voices and finally in a rousing ensemble with cornett and sackbuts.

As he made clear in his recorded survey of "Instruments of the Middle Ages and Renaissance" (Angel SBZ 3810. February 1977), Munrow subscribed to the belief that music of the Renaissance is particularly suited to consorts of similar instruments. The side of instrumental music in "The Art of the Netherlands" includes groups of rebecs and recorders, rauschpfeife and sackbuts, as well as lutes and keyboard instruments. The intonation is occasionally so good as to be uncanny. A family of krummhorns playing "T"Andernaken" are so together they sound like an accordian, and the recorder ensemble of "La Guercia" speaks like a perfectly tuned early organ.

The musical heights of the Renaissance, however, were reached in the Mass and the motet. The sampling of these genres here increases my regret that Munrow did not live to explore this repertoire in greater depth. The side devoted to the Mass is an ingenious selection of music designed to cover as much territory within as short a space as possible. A composite Mass with previously unrecorded movements by five composers illustrates five different techniques of composition. The Kyrie from Tinctoris' three-voice Mass is freely composed, while the Gloria and Credo by Brumel and Josquin are based on a Gregorian and a secular cantus firmus, respectively. That Josquin's Credo is based on "De tous biens plaine" and that the motet model for Pierre de la Rue's Sanctus, "Ave sanctissima Maria." is also recorded in this collection is more evidence of Munrow's enthusiastic didacticism. But don't be misled by the intellectual rigor of the compilation: The music, especially Brumel's magnificently rich-textured Gloria "Et ecce terrue motus" and the jazzy Agnus Dei from Isaac's Missa La Bassadanza, is irresistible to listen to. Munrow throws himself into the spirit, relishing the cumulative sonorities and regularly recurring rhythmic beats like a top-notch rock musician

If the final disc devoted to the motet is

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not as completely satisfying as the rest of the collection, Munrow still achieves some brilliant performances in this demanding form. One of the most exciting is in Obrecht's extrovert Laudemus nunc Dominum, which hides complex musical devices within romantic emotional outbursts much in the manner of Alban Berg. Ockeghem's rich and beautiful five-voice motet Intemerata Dei Mater also receives a splendidly sensitive reading, although the scoring used by Munrow is not made perfectly clear.

The liner notes tell us that "the music on Sides 4–6 has been performed unaccompanied, mostly with one voice to a part." Five soloists are listed for the Ockeghem motet, and although the singers throughout are so extraordinarily capable that one could be-

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lieve almost anything possible, there is surely more sound here than even these five stalwart men can produce without straining. And, indeed, a small picture of Munrow recording Intemerata Dei Mater shows thirteen singers, four of them (at least three apparently basses) with their mouths open. This kind of confusion is unfortunately symptomatic of the recent decline in the accompanying matter, which distinguished so many of the recordings released during Munrow's lifetime.

It is hard to single out performances with so very many excellent musicians on hand. Terry Edward's sonorous bass is outstanding in the solo vocal ensembles, and James Bowman does some predictably elegant singing, though I wish he had taken Ockeghem's wistful chanson "Ma bouche rit" a bit slower. Among the instrumentalists, lutenist James Tyler is especially stylish in two deceptively simple Netherlandish dances. But this is ultimately a recording of ensembles and the most important figure is the conductor. Epitaph or legacy, "The Art of the Netherlands" will stand as a monument to David Munrow.

S.T.S.

LUCIANO PAVAROTTI: O Hoły Night. Luciano Pavarotti, tenor; Wandsworth School Boys' Choir, London Voices, National Philharmonic Orchestra, Kurt Herbert Adler, cond. [Ray Minshull, prod.] LONDON OS 26473, \$7,98.

ADAM: O Holy Night (sung in English and French.) NEIDER-MEYER (Stradella): Pietà, Signore. FRANCK: Panls angelicus. MERCADANTE: Le sette ultime parole di Nostro Signore sulla croce: Parola quinta. Schußert: Ave Maria (sung in Latin and Italian). YON: Gesù bambino. BACH-GOUNDO: Ave Maria. SCHUBERT-MELICHAR: Mille cherublni in coro. Bizet: Agnus Del. WADE: Adeste fideles. BERLIOZ: Requiem, Op. 5: Sanctus.

The inspiration for this record seems to have been sanctimoniousness. At first sight it looks like a Christmas record, but in fact only three of the eleven selections have anything to do with Christmas. The rest are either, like "Pieta, Signore," generally religious or, like "Mille cherubini in coro," vaguely religious.

Musically, the pickings are slim. The Mercadante Seven Last Words excerpt is interesting to hear once, and Adam's "O Holy Night" has a good tune. The rest is dreadful stuff, and that includes what passes here for Schubert's Ave Maria, orchestrated out of existence and sung in two languages. "Mille cherubini in coro," a gooey and secular cradle song, was concocted for Gigli's 1936 movie Forget-me-not and sounds like it. Unfortunately, Pavarotti is no McCormack: He cannot transform rubbish into art. In any case, he is not in very good voice. "Pietà, Signore," which requires refinements like trills and ornaments, exposes his technical limitations badly.

Only the performance of the Sanctus from the Berlioz Requiem, the one first-rate piece of music on this disc, has any real quality. Moreover, it's interesting to hear a full-blooded Italian tenor in music usually reserved for a more etiolated kind of voice, even though the conducting, the chorus, and even the orchestra are particularly weak in this selection. There is doubtless some significance to the fact that the text of the Sanctus is omitted without apology from the leaflet, which gives texts and translations of everything else. D.S.H.



TOUCH OF EVIL\*; THE NIGHT VISITOR\*. Original film scores by Henry Mancini. Joseph Gershenson\* and Henry Mancini\*, cond. [Tony Thomas, prod.] CITADEL CT 6015, \$6.98 (mono).

THE MIDAS RUN. Original film soundtrack recording. Composed and conducted by Elmer Bernstein. [Tony Thomas, prod.] CITA-DEL CT 6016, \$6.98.

Of the several small companies specializing in film music these days, Tony Thomas' Citadel label has certainly come up with some of the most offbeat and unexpected releases. (Citadel has issued some concert music as well.) Two of the scores on these two discs, for instance, are for recent films that have been virtually forgotten, The Midas Run (1969) and The Night Visitor (1971). In any case, I must admit to being stumped as to what inspired Citadel to bring out The Midas Run, an often bouncy, sometimes cornily romantic piece of trivia not at all representative of Elmer Bernstein's talents.

But The Night Visitor is a revelation. Composed for a Swedish-based suspense and murder film, Mancini's score has not one true theme in it. Instead, the composer uses only twelve woodwinds, an organ, two pianos, two harpsichords, and percussion to produce various chords, theme snippets, and rhythmic figures that immediately grip and chill the listener's nerves. Particularly intriguing is his creation of quarter-tone harmonies through the tuning down of one of the pianos and one of the harpsichords. The entire seventeen-minute suite beautifully proves, in fact, how unfortunate the typecasting of Mancini as a mod-suave composer has been. The suspense genre needs the skill and originality that he shows here (and also, for instance, in Experiment in Terror), and I can only hope that he will get vehicles of suitable quality for this excellence in the future.

A Touch of Evil, once available in a more nearly complete version on the defunct Challenge label, is much more what everybody seems to think is the Mancini. Composed hand-in-hand with Orson Welles for the actor/director's 1958 film, the score was devised to come out of various "sources"such as radios-in the sleazy Mexican setting. Much of the music heard on this disc is based on the title theme, an ominous bit of Latin-flavored, Peter Gunn-type jazz, complete with bongos, at which Mancini excels. It perfectly fulfills the double function of providing pop-type source music and background suspense accompaniment. There is also a charming tune for Tana (Marlene Dietrich) played on a player piano with instrumental backup.

Both discs are well recorded, although I give the edge in brightness and depth to the mono-only Mancini disc, both of whose scores should be indispensable to any filmmusic collection. R.S.B.

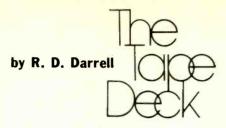




The open reel: born again? It has been a glacially slow gestation, but after many premature expectations there actually is a phoenixlike rebirth of the once (and not impossibly future) king of the recorded-tape medium. It's a double renaissance, indeed. On the West Coast, Stereotape/Magtec returns to activity not only with more RCA open-reel programs, but also with the first London and Deutsche Grammophon reels since Ampex abandoned them. And on the East Coast, the reel-specialist company of Barclay-Crocker has begun, after laborious preparations, its own processings-a series starting off with Musical Heritage Society programs, soon to be followed by those from Vanguard, Desmar, and Halcyon, with the first American reels of Unicorn recordings scheduled for this fall. Between these two production sources more than a hundred new reels should be available about the time this column appears in print.

At the moment I write, the most familiar and substantial works are from Stereotape. The first Barclay-Crocker releases are mostly chamber and solo instrumental MHS items for which world rights are obtainable (excluding at present those of Erato and Lyrita derivation). Nevertheless, it's this momentarily modest series that holds the most exciting promise: a reaffirmation of the original reel-tape Rolls Royce or Tiffany quality ideals. The B-C assumption is, mirabile dictu. that reel collectors are discriminating connoisseurs of both music and stateof-the-art audio technology. The processing features not only Dolby noise reduction and the inclusion of Dolby test tones, but also a duplication speed ratio of only 4 to 1 (instead of anything from 8 to 1 to 32 to 1), premium low-noise raw tape (Audiotape Q-15), and a novel "Sonic Sentry" for fast-spotting a delayed music-start in short first sides. For frosting on the cake, B-C labels, box covers, notes and texts, and explanatory and maintenance leaflets all are printed in distinctively attractive typography.

**Tapeworms' metamorphosis.** Those seemingly foolhardy reel evangelists Messrs. Barclay and Crocker, whose retailing beginnings I greeted with hope but some skepticism in March 1973, make their manufacturing debut with seven Musical Heritage programs priced at only \$6.95 each (the coming Vanguard singles will be \$7.95 each). Among them the most offbeat and not the least rewarding is the oldest pair of recordings represented: the 1966 versions of rarely heard piano concertos by Domenico Puccini (1771-1815, Giacomo's grandfather)



and Viotti (usually known only by his violin works). What fascinating novelties these are! One is delectably galant and most un-Puccinian, the other an unexpectedly impressive forerunner, by a couple of years, of the Beethoven B flat major Concerto. The sonics may be a bit faded, perhaps. but still just right for soloist Eugene List's properly light-toned Bösendorfer piano. And if the Austrian Tonkünstler Orchestra is only so-so, both List and conductor Zlatko Topolski are first-rate, while the processing is well-nigh ideal (MHS7B-C C 0709).

The same processing excellence characterizes the other three reels l've heard so far. The most recently recorded is a Saint-Saëns woodwind/ piano program (MHS/B-C C 3324) combining the pleasantly meandering Op. 79 Caprice on Danish and Russian Airs with the extraordinary Opp. 166-68 Sonatas of 1921 (the composer's last year), which reveal a sensibility and poetic eloquence few listeners associate with Saint-Saëns. The Minneapolis Chamber Ensemble's planist, Paul Freed, is outstanding throughout but must share honors with bassoonist John Miller in the noble Op. 168 Sonata. The oboist and clarinetist play well but with less distinction, and both they and the flutist are overshadowed by the pianist in the Caprice.

The MHS/B-C C 1218 recital of Sibelius piano music is the first recorded example of its kind I've ever encountered. It includes the relatively early (1893), quite orthodox Sonata in F, Op. 12; three Kyllikki lyrical pieces, Op. 41, of 1904; and three more improvisatory Op. 67 Sonatinas of 1912-all played by David Rubinstein with almost objective straightforwardness and recorded with bold vividness in a rather dry acoustical ambience. Sibelian specialists can't afford to miss these rarities, and there's undoubtedly a larger, if still specialized, audience for the Brahms organ works in MHS/B-C C 1751. Here the bestknown late Chorale Preludes, Op. 122, are augmented by a prelude and fugue and a chorale prelude and fugue of some forty years earlier. They are performed with dogged earnestness by Haig Mardirosian on the 1965 Moller organ of the Church of St. Paul the Apostle in New York City. The brilliant recording, highly reverberant

empty-church ambience, and thickly religioso musical and tonal qualities may appeal as strongly to some tastes as they are antipathetic to mine.

London's reel return, via the now-Dolbyizing Stereotape/Magtec, features three operas with three more coming soon, along with two each from DG and RCA. The only one I've heard so far is the superbly dramatic Verdi Luisa Miller starring Caballé and Pavarotti in a notably big and warm recorded performance led by Peter Maag (London/Stereotape OSAO 13114 U, \$24.95). Among the nonoperatic releases I've heard with lively relish are Ashkenazy's complete Rachmaninoff preludes (CSAO 2241 D, double-play, \$15.50) and Alicia de Larrocha's elegant Ravel piano concertos with soft-focused accompaniments led by Lawrence Foster (CSO 6876 A, \$8.95)-a reel that also includes the delectable Fauré Fantaisie, Op. 111, with Rafael Frühbeck de Burgos conducting. All these are processed satisfactorily (if to less lofty standards than the Barclay-Crocker reels). but while notes are provided the opera libretto is reproduced in such minuscule type size that only myopes like me can read it without a magnifying glass.

Fully discrete RCA quadriphony.

There's an inexplicable apparent processing flaw in two otherwise impressive RCA/Stereotape quad reels just received. It's the kind of wind-between-the-worlds noise I think of as "amplification roar," here in the left front channel only. Yet the Dolbyization itself seems quite good and is especially welcome since RCA's own earlier cassette editions of these works were non-Dolby. Of course, the unwelcome "roar" is evident only in the quiet passages-of which there aren't too many even in the expansively rich Harrell/Levine/London Symphony Dvořák cello concerto (ERQ 1-1155 QF, \$12.95), much less the powerful, starkly somber Ormandy/ Philadelphia Shostakovich Fifth Symphony (ERQ 1-1149 QF, \$12.95). What's most dramatically gripping, however, is the potency with which four-channel playback enhances the Dvořák's spacious ambience and the fully panoramic sound field of the Shostakovich.

Write, don't run. In the new reel era, forget your not-so-tape-friendly neighborhood record dealer. Write Barclay-Crocker, 11 Broadway, New York, N.Y. 10004 (\$1.00 for catalog and "Reel News" supplements) and/or The Reel Society, Box 651, Arlington Heights, Ill. 60006 (25¢ for catalog).



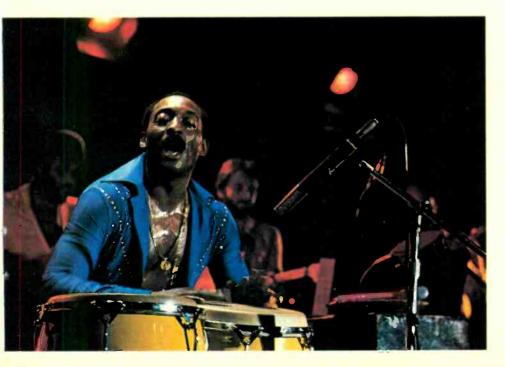
## Ralph MacDonald— Modern Musical All-Rounder

by John Storm Roberts

Calling Ralph MacDonald a percussionist is a little like calling Duke Ellington a pianist: the truth, but very far from the whole story. The rise in the importance of percussion—from fringe Forties novelty act to the core of Seventies pop—has been the doing of a handful of virtuosos, and indeed, MacDonald is among them. But he's also the model of a modern musical all-rounder: performer, sessionman, composer, bandleader, producer.

One of New York's busiest studio percussionists, MacDonald has played on so many albums that he's lost count. He provided the cowbell on Roberta Flack's *Killing Me Softly* and five separate percussion instruments on her *Feel Like Makin' Love*. He played on George Benson's album "Breezin'." He seems to be a permanent fixture on CTI Records. He has backed Paul Simon, Aretha Franklin, Bette Midler, and on and on. And that doesn't take into account the endless commercials, from Chevy to Bud to McDonald's (no relation).

As songwriters, MacDonald and his partner William Salter are best known for *Where Is the Love*—recorded by 125 performers in nineteen languages, with four separate versions becoming million-sellers since Roberta Flack and Donny Hathaway introduced it. They also wrote Grover Washington's hit *Mr. Magic*,



Flack's *Trade Winds*, and Shirley Bassey's *When You Smile*, all also million-sellers for Antisia Music, in which MacDonald, Salter, and William Eaton are partners. The company also owns Rosebud recording studio and Bullet Instrument Rental Co., renting out synthesizers and other costly toys.

With all this behind him, it wouldn't take a compulsive gambler to bet that the credits would sooner or later be reading RALPH MACDONALD rather than (Ralph MacDonald). Last year, his first solo album,

#### "I like it when people tell me I can't do something. It makes me go and do it."

"Sound of a Drum" stayed within the Top 5 of the jazz charts for two months, while at the same time *Calypso Breakdown*, the LP's single, went to No. 1 on the disco charts.

MacDonald's background, with its endless jigsaw of influences, seems tailor-made for such successes in the contemporary music scene. He was born in 1944 in Harlem, where his father played traps and led a fourteen-piece calypso group under the stage name of MacBeth the Great. He had wanted his son to play trumpet and sax, but with six uncles who played congas Ralph's preferences were set long before he was tall enough to see over the tops of their instruments.

The West Indian dances for which his father played always used second bands, usually a Latin group or a steel band. MacDonald learned steel pans as a kid and as a teenager was leader of a steel band at a youth center. He also used to jam with a bunch of African-type drummers on the roof of his apartment building in addition to playing congas for Katharine Dunham's ethnic folk dance school for a dollar an hour. "I used to have a friend of mine carry the congas to the station, and when I got off at 42nd Street I had to drag them to the studio because I wasn't tall enough to carry them on my shoulder."

The mixed bag of early experiences "was the best training in the world. I'd be with my father on the stage, getting that whole calypso idea, and then the Latin band or the steel band would come on. And then on the roof at home with the guys that were into Afro-Cuban drumming. And the dance classes were into all kinds of rhythms. I've been able to extract from all these things."

When he was seventeen, MacDonald began playing steel drums on Harry Belafonte's tour and met Salter (then bassist with Belafonte's costar, Miriam Makeba) and Eaton (who became Belafonte's musical director). In 1962 he switched from pans to congas and was soon featured in the stage show as conga soloist and dancer. He also began writing songs during this period, and composed, arranged, and conducted one Belafonte album. "Calypso Carnival."

It was Belafonte's inauthenticity as a calypso singer and the weakness of his material that got MacDonald launched. "I kept telling him that he should sing some real calypsos! So he said, 'Well, why don't you write me one since your father was supposed to be this great singer!' I really had an attitude! I like it when people tell me I can't do something. It makes me go and do it."

The resulting song, built on the Great MacBeth's Don't Stop the Carnival, became Belafonte's showcloser. It also gave MacDonald the taste of blood. He branched out into noncalypso material and, in 1969, founded Antisia Music.

By 1970, he had had enough of the road. He had done some studio work between Belafonte's extensive tours and decided to concentrate exclusively on that. But before long he found himself working with Roberta Flack in the studio, and later touring with her on weekends. They played the Montreux Jazz Festival, the starting point of his present association with pianist Richard Tee, bassist Chuck Rainey, and guitarists Eric Gale and Hugh McCracken. It was an ideal arrangement—touring on weekends and working in the studio during the week—and a period that moved MacDonald toward his current jazz orientation through record dates with Sonny Rollins for Fantasy and a large number of CTI artists.

It was quite a background, and MacDonald's style shows the whole of it. He bridges the gap between the traditional uses of percussion in Latin and other music, and the more avant-garde practitioners' tendency to temple bells and a vague impressionism. His conga playing has an Afro-Cuban base, personalized by his Trinidadian background as well as by his own tastes and the various demands of contemporary American music.

His albums are what jazz purists tend to call, rather sneeringly, "crossover," which puts him squarely in the mainstream. But jazz is a crossover music at heart, and MacDonald's work seems exemplary in that sense. *Mr. Magic*, from "Sound of a Drum," is a marvelous piece of Latin jazz. And that LP's title cut finds MacDonald moving from a justlight-enough Indian feeling in the intro through a series of strongly African references, while above him



Offspring Jovanni and Anthony get an early start

Grover Washington switches from soprano to tenor sax—almost from creole pre-bop to post-Parker idioms. The disco hit *Calypso Breakdown* includes a totally delightful piece of calypso clarinet playing by a former member of his father's band, Clinton Thorbourne.

His Caribbean background forms the centerpiece of his new album, "The Path," which features Grover Washington and a relatively new singer, Gwen Guthrie. ("Not too many people are really hip to her—but they will be!") Trinidad music has strong overt African ingredients; Shango, the West African god of thunder, is worshipped there as well as in Brazil, Cuba, and many big U.S. cities. This god is invoked by a specific drum rhythm, which MacDonald also calls a shango.

"'The Path' starts off with a Nigerian shango, segues into a calypso, and then into uptempo disco. It just struck me as something challenging, and something that would be really representative of percussion and where it came from. West Indian shango, Nigerian shango, Haitian shango, Cuban shango, it's all one." "The Path" brings a smile to MacDonald's face whenever he talks about it. "It's a dramatic piece, and I love it!"

But although he is very much into his own Afro-Caribbean roots, he is also acutely aware of a wider world: "When you find out about all the different kinds of music, you find out just how little you really know about it. I was playing with Nana Mouskouri recently—playing in 9/8, 17/8—a real challenge. And Indian music! To me that's one of the most unexplored frontiers. It is so far above this foolishness of one-two-three-four, I swear to God it's almost embarrassing!"

MacDonald and his peers take their influences from everywhere—but what they make of them is their own thing. "The average conga drummer, that's all he used to play. But a lot of songs don't need conga drums. So I picked up different kinds of instruments as I traveled around the world. People figured they were going to be hanging on my wall, but I was buying them for the future.

"Most people never think about the future. I always think about the future. There's going to come a time when we're going to play something that doesn't call for congas. What am I going to do? Sit on the stage and look dumb?

"People look at instruments and say, 'What is that?' I don't care what it is, I don't care how you're supposed to play it, I want to know what it sounds like. And if that sound goes in the computer bank in my head, then whenever I want to reach for it, I know just where it's at."

That can lead to a lot of fun. Perhaps through some kind of group memory of the old novelty days, most percussionists have their gimmick instruments: Maurice White's African finger piano, Airto Moreira's sundry self-devised weirdries. MacDonald's gimmick sounds like some kind of metallic castanet. In fact it's a pair of red and blue plastic hammers—the kind that babies beat up on Teddy bears with. He demonstrates them with innocently wicked glee, like a child who has



Richard Alderson and Ralph do a mixdown at Rosebud

swung something at the adult world: "I believe these hammers are going to make me more famous than the drums ever did!"

Onstage, his rattles and bells and the other small tools of his trade are compactly arranged around him with none of the lavishness of Brazilian percussionist Portinho, who selects like a mad chef from a large market stall of goodies. His conga playing is very tight and "up": almost too much so, leaving little room for dynamics. But he is blessedly free of "look-a-me" pyrotechnics, mostly devoting himself to driving a no-

"The studio's not really knocking me out like it used to. . . . I want to write and perform and get into production."

tably fiery and jumping band reminiscent of the days when jazz and pre-rhythm-and-blues were part of a continuum.

And if the call to Shango gives MacDonald his roots, his trunk and branches are firmly in the current musical scene. The countless hundreds of hours on the road and in the studio show in a general low-key lack of the need to impose himself, an aura of being both reasonable and a bad person to cross. They show, too, in the people he hires and the way he works with them.

His band for a recent live gig at Smuckers, a club in Brooklyn, consisted of relatively young studio players who blend an ability to jam with a plumber's ability to show up with his tool kit, diagnose the problem, fix it, and walk out. The all-star lineup consisted of Barry Rogers, who began with Eddie Palmieri and is becoming one of New York's busier trombone sessionmen: the Brecker Brothers (Randy on trumpet, Michael on tenor sax); Arthur Jenkins on keyboards; Richard Tee on piano; Eric Gale and Hugh McCracken on guitars; bassist Chuck Rainey; and Steve Gadd and Rick Marotta on drums.

Sessionmen like these are music's new tech-







nocracy, and MacDonald's description of what it takes to make it as a studio musician says a lot about the increasing professionalism of pop music: "It takes a whole lot of discipline, and the average musician doesn't have that. Very few people can go into the studio with a fresh mind and put that music first. Most people think you're supposed to go in and play everything you were ever taught. I've seen a lot of guys blow the whole situation that way. The point is the music, not for you to show off and let people know that this is what you can do.

"You have to have that kind of discipline and that kind of personality. You have to know how to deal with people and how to handle yourself. Teamwork. You have to listen to what these other giants are doing. You ain't the only giant out there!"

As part of his aim to break away from his singular percussion image, MacDonald is winding down his studio activity. "I'm a little haunted to get back out there a bit more. The studio's not really knocking me out like it used to. Who else is there left to play with? I've played with a lot of the best people in the business, and I dig it. But the gleam is gone. I want to write



songs and perform myself and get into production."

Antisia has become an important part of Mac-Donald's strategy. "When we got into it, it was to get our songs going. But after a while you think, what are you going to do when you can't play no more? I like the music business, and the business side is a whole other hat. Within the next three months we hope we will have our own record label.

"And then again, I don't want to clutter myself. I don't want to be one of those people that runs around doing a thousand different things. I'd rather do one good job than four halfway jobs.

"My main aim is to get established in this business as a solo artist and as a person who can sell records. I want to find some fine line where I can do my music and get enough enjoyment and satisfaction out of it."

A couple of weeks ago a buddy in a Brooklyn record store—one of my "pulse-of-the-people" contacts—told me admiringly, "MacDonald? Man, he's *hot*!" Since he's also got as much business sense as artistic sensibility, it looks like he's fixing to stay that way.



## **Resurrecting the Beatles:** Star-Club to Stereo

by Charles Repka

The year was 1962, the place Hamburg, Germany. Ted "Kingsize" Taylor and the Dominoes were in town for a three-night stand at the Star-Club. Taylor had asked for a recording of the gig, and someone at the club obliged with a simple one-microphone setup plugged into a mono Grundig tape recorder. The machine ran continuously, capturing Taylor's performances and those of two lesser-known acts also on the bill: Cliff Bennett and the Rebel Rousers and an up-and-coming quartet from Liverpool that called itself the Beatles.

Not many people know what happened to Cliff Bennett or Ted Taylor, but that up-and-coming quartet went on to become one of the major musical influences of this generation. After Hamburg the tapes were momentarily forgotten. Taylor eventually offered them to Brian Epstein (the Beatles' manager), but Epstein didn't think they had any commercial possibilities. Subsequent offerings throughout the Fab Four's incredible career were also refused (last spring, they did attempt to stop the distribution of the LP), and in time Paul Murphy of Lingasong Records in London acquired the tapes and sold the rights to the Double H Licensing Corporation in New York last fall. What does one do with a historic, mono. 3<sup>3</sup>/<sub>4</sub> inches-per-second Beatles recording? Put an enormous amount of faith in modern technology, and make it into a commercial LP-of course.

The job was not an easy one; in fact it's one of the most technologically ambitious projects ever attempted in the pop music field. The man behind it all is Larry Grossberg, an independent producer/engineer. We met in his comfortably furnished mid-Manhattan apartment to listen to the finished product and discuss the restoration process. "Lee Halpern, president of Double H, and his attorney Walter Hofer knew about the tapes and had been pursuing them for some time. Lee came to me one day with the news that he had just acquired the rights to a Beatles album. I said that was terrific. Then I asked him if he had heard the tapes and he said, 'You know I'm not a judge of

The author is a recording engineer for the Vanguard Recording Society.

music.' Then I said, 'Well, don't you think you should listen to what you just bought?' "

Halpern apparently thought it was a good idea, and they arranged for a first listen. Grossberg recalls his reaction. "All I could say was, 'Jesus, that's bad! That's a pretty terrible recording.' But at the same time I thought it was commercially viable and could be improved upon with modern studio techniques."

Murphy must have had the same thought earlier, for what Halpern played for Grossberg was actually a

#### "Hum, tape hiss, distortion, wow and flutter, background noises, performers too far off mike you name it and it was there."

16-track, 2-inch tape copy of the original, with the same mono program on each of its tracks. This "multitrack mono" tape would allow Grossberg to use the separate (though of course identical) tracks as his basic source material. From each, he would attempt to isolate, draw out, and eventually enhance one instrument or voice, and then put them back together in an improved form.

Clearly, this was to be no overnight lark. So Grossberg booked several months at New York's Sound Ideas recording studio, sent out for lots of coffee, and got down to business. "The first thing I did was to sit down and just listen to try to identify things. As I listened, I began to realize there were a lot of problems. A lot more than I had anticipated. This was a recording made in 1962, under the severest of conditions, on a Grundig mono home recorder at 3<sup>3</sup>/<sub>4</sub> ips using a handheld mike of dubious quality. The tapes had every classic problem: Hum, tape hiss, distortion, wow and flutter, background noises, performers too far off mike-you name it and it was there. It took about two weeks of experimentation [at \$1,500 per day] before I started to understand what had to be done and which procedures to follow."

The initial task was to create one track for each ele-

ment: bass drum, top hat, snare drum, cymbal, bass guitar, lead guitar, lead vocal, and choral vocal (they actually used between eight and thirteen of the sixteen available tracks). This was done by selectively filtering and equalizing the original mono signal for each instrument's specific frequency. For example, the bass drum track was created by cutting off all high frequencies, then accentuating a narrow frequency band centered at about 100 Hz. The lead guitar was likewise found by boosting frequencies in the 3 kHz region.

#### "Some of the tunes were in pieces. The beginning of I Remember You was missing altogether."

Ashly .05-octave parametric equalizers were the most significant tools in this process. Since they can be finetuned to hear only a small portion of the original signal, while rejecting everything else, they in essence could "find" those almost inaudible instruments that were buried within the original recording.

In addition to the Ashly parametrics, an arsenal of other signal-processing devices was rolled in, including Burwen noise suppressors, UREI compressors, Kepex noise gates, API dynamic sibilance suppressors, and an assortment of equalizers. The DBX Noise Reduction System was used to ensure that there would be no additional noise buildup during the long and complex transfer process.

The proliferation of hardware brought with it a new set of problems. "There would be times when we would blow up a sound lost in the background," says Larry. "But in bringing it up, it carried with it enormous distortion and background noises, so we'd try using something else to minimize noise. So on any particular track, say a cymbal, we could be using an Ashly, a sibilance suppressor, a noise gate, a compressor, and a limiter. But at the same time, as you isolated one thing, something else-like a guitar chord-would suddenly shoot out of nowhere because it fell into the same frequency range." (Guitar chords were a particular problem on the vocal tracks, because of the similar frequency ranges.) "Then we would have to go back and change things slightly and try again. And this was done for each track on all twenty-six tunes."

And then there was the problem of electronic interactions between all the various "black boxes." As Larry says, "It was a learning process. I found out what happens when you hook up three or more of these devices at the same time. Utter chaos!"

Because this was originally a homemade effort, some of the tunes were in pieces. Occasionally the Grundig would run out of tape in the middle of a song, or RECORD did not get depressed until well after a number had started on stage. The beginning of *I Remember You*, for example, was missing altogether. And some of the tunes were reconstructed from different performances during the three nights of recording. The beginning of a song might be from the second night, the middle from the first night, and the ending from the third night. And since the recording sounded different on each night, great care had to be exercised in matching the pieces so that they could eventually be spliced together.

Assembling the restored "chunks" of tape into a smooth continuous performance complete with audience reaction was the next step. "The songs have been put into the sequence we felt the Beatles would have wanted." The transitions between tunes were created by putting disconnected bits of applause (which wasn't in abundance—the Beatles were simply another young band trying to make it at this time), audience noises, and onstage comments made by the band on a tape loop. This wild track was put on a separate machine and brought up between cuts.

But even the wild track had its problems. Kathy Dennis, who assisted Larry at Sound Ideas, recalls the inevitable burst of loud laughter that kept coming round again on the tape loop. That, of course, had to be toned down considerably in deference to the performers. And then there was Horst the waiter, who joined the group on *Be Bop A Lula* (sic). The audience apparently loved him, and it was the engineers' task to bring up the level of the Beatles' reception to match their chants of "Horst, Horst."

After many hours of fiddling, filtering, equalizing, expanding, compressing, and crying, the separate tracks were ready for the final mixdown. Interestingly enough, that mixdown was "back to mono"(!), even though the eventual record would be in stereo. But keep in mind that the original source was mono. And although the much-manipulated multitrack tape had given Grossberg the control he needed to correct many of its deficiencies, the finished product could still not match the latest big-budget, studio-slick, stereo recording productions. Besides which, Grossberg wasn't aiming for flawless sound reproduction (which would have been impossible anyway), but a recreation of what that Hamburg audience heard some fifteen years ago. A stereo mixdown of the doctored tracks was not the answer. It might have sounded cleaner than the original but too electronically "contrived." So Larry dragged out yet another electronic marvel: the Orban/Parasound Model 245E Stereo Synthesizer.

The 245E simulates a stereo effect by breaking down a mono program into several frequency bands, some of which are routed to the left, while others go to the right. The overall effect is one of a concert hall type of ambience, ideally suited to the project. As Grossberg put it, "The perspective we sought was that of the audience, sitting and listening to the Beatles at the Star-Club. A live performance is a hell of a lot different than a studio mix, and the sound we got out of the Orban was just what we were looking for."

Finished now? Well, not quite. Before writing an end to this project, the tapes were sent to Bob Ludwig at Master Disk, for transfer to a lacquer disc from which pressings would be made. But when the test cuts were reviewed, using average, home-type loud-



speakers, the sound did not live up to expectations. Lingering distortion components in the master tape seemed to be aggravated in the transfer process, and Larry felt that some more work should be done, right at the disc-cutting lathe. Making those further equalization changes while cutting was complicated by the fact that a playback stylus picks up a sound about half a second *after* it has been cut. Therefore, Larry had to anticipate the necessary changes as cutting progressed, and trial and error was the rule of the day.

After many more hours in the cutting room than originally anticipated, the lacquers were okayed and readied for pressing. Titled "The Beatles Live! at the Star-Club in Hamburg, Germany; 1962," the LP was released first in Germany, where, according to Larry, it "instantly went Gold." It is due out soon in the U.S.

But how does it sound? After hearing what Grossberg had to work from, it's safe to say that he and his team of experts achieved their intended goal: the successful representation of the early Beatles in a live—if somewhat chaotic—club-date setting. Sound quality is not the LP's selling point. It is a historic document, and, as Larry puts it, "There is a charisma captured on this album that was absent from their first three or four albums. Once they got into the studio, they had to go through the process of learning how to be natural in unnatural surroundings."

The LP is also quite significant for its technical achievement. Larry believes there are many commercial possibilities for recordings of this type with such artists as Janis Joplin, Jim Morrison, Jim Croce, Bob Dylan, and Jimi Hendrix. "I would like to see more albums from early tapes of now famous performers. It's a part of our musical heritage." It will no doubt happen in the not-too-distant future.

See page 111 for a review of "The Beatles Live! at the Star-Club in Hamburg, Germany; 1962."

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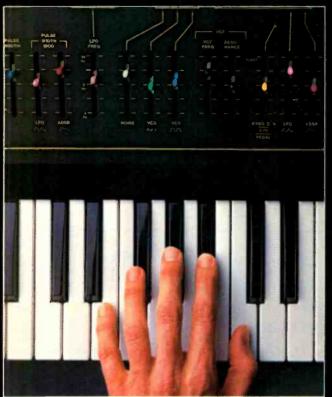
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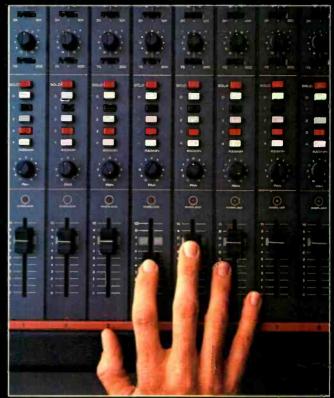
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Instruments and Accessories

### **Musecom II**

The growing alliance between music and computer technology is one of the most fascinating and potentially rewarding developments since the invention of electrical recording in the mid-Twenties. The ways in which computer elements can make life easier for the musician and the recording technician are only beginning to be explored, and are gaining almost daily, both on the largescale corporate research and development level and in the semipro doityourself area.

One of the most familiar applications is the use of digital electronics to create practical delay systems free of the irritating problems inherent in spring reverbs and tape loops. Digital memory is used for program storage in synthesizers and recording studio mixdown boards. Its ability to recall any element of a mix has been an enormous boon to harried producers and engineers. And digital sequencers are capable of maintaining and recalling any assigned sequences of sounds.

Musecom, Ltd., in Playa del Rey, California, has come up with a further, and quite startling, application of computer technology to music-the Musecom II. Very simply, it is an instrument that instantly notates any musical work fed into it through its keyboard terminal. The four basic components-an electronic piano keyboard, a video monitor, an incremental plotter, and a small computerare housed in modern wood cabinetry. Features include access to all key signatures, major and minor; a metronome that can be set for any rhythm, both with subdivisions and with accents; eighty time signatures: easy transposition from/to any key; instant display of



whatever is played, measure by measure, on the video screen; audible replay of recorded material; scoring capability on a single treble staff, a single bass staff, or the grand staff; and printing of the final score through the incremental plotter.

The instrument is not difficult to operate. After the user determines his choice of rhythms, staffs, time signatures, key signatures, etc., he plays the keyboard. The printed music appears simultaneously on the video screen. If there are mistakes or changes, the score can be rolled back and any kind of adjustments—rhythms, notes, keys—can be made in the notation. And the composer can listen to his creation at any point during its conception. When the music is complete, a notated score is delivered through a slot on the right side.

The unit was developed by Jim Troxel, a Los Angeles studio musician and percussionist. The key element, he says, was teaching the minicomputer to "converse in standard music notation." Otherwise, the composer would have to convert musical elements into computer language.

The Musecom's potential for nonreading composers and for schools, recording studios, and music publishing companies is enormous--although it may deprive music copyists of a profession. For the moment, the price (around \$18,000 and up) will minimize technological unemployment. Access to it would seem to be limited to the most financially successful musicians and composers. But historically, the cost of elec-



The incremental plotter



A sample of a Musecom II printout-music copyists beware

tronically sophisticated hardware has gone down with time.

Troxel looks to the future development of an input terminal more powerful than a keyboard. He envisions a system in which any musical soundsung or played-can be picked up and converted into sheet music. It would be feasible to provide a telephone service wherein the subscriber could phone into a Musecom terminal, sing or play his composition, and receive a neatly printed copy of it in the mail the following day. Troxel sees that development as close as a year and a half away.

#### CIRCLE 124 READER SERVICE CARD

#### DON HECKMAN

Teac Tascam Series 80-8 Tape Recorder. Since the serial number of my Tascam mixing board is 00003, you might suspect that I've worked with Teac gear for some time now. Having used Models 2, 5, and 10 mixers, the 701 and 3340 tape recorders, and now the 80-8, I can safely say that the latter is one of the company's best recorders to date. Running at 15 ips, the 80-8 records eight tracks on 1/2-inch



#### Teac 80-8 Tape Recorder

tape and offers a number of features not previously available.

Most welcome is the easy access to the record/playback electronics: You can align the machine yourself. Of course, you'll need an alignment tape and a test oscillator, but if you're serious about making high quality recordings, you will have these items on hand in any case.

Features of the 80-8 include overloadindicating LEDs above each VU meter, a pause control, and status lights (LEDs again) to indicate track function and the three output modes. The eight-track function select LEDs are just above their corresponding pushbuttons. Depending on the position of these buttons, any track (or tracks) will go into RECORD or stay "safe" when the master record button is depressed. The output mode selectors allow the engineer to monitor in-

put to the tape recorder, playback outputs, or a combination of these when the machine is in the sync mode.

When a pushbutton memory switch is depressed, the tape will stop whenever the index counter reaches zero, a handy function for continuous return to a "punch-in" point or to the beginning of a take. For manual cueing (in the PAUSE or stop mode), there is a latching cue lever on the front panel. Note that this should never be latched on while in the fast forward or rewind modes. lest you send your tweeters to the big studio in the sky. Besides that, you'll also wear down the machine's heads, possibly wreck the meters, and no doubt break your lease. In any case, heed the cautions in the owner's manual.

The back panel includes an accessory AC outlet, a remote control jack, and a ground terminal. Input and output connections are made via two rows of eight RCA-type phono plugs. The unit has been designed to interface with a DBX noise-reduction system, which is available as an option.

Tape handling is excellent, with smooth operation from the fast modes into PLAY or STOP. The machine has motion sensing to protect tapes from destruction if the wrong sequence of buttons is pushed. The function switches are virtually noiseless, and the machine runs cool for long periods of time. General ease of operation is an asset, and considering the magnitude of the 80-8's tasks. the machine is quite compact, measuring 171/2 by 21 by 12 inches.

Since it uses 1/2-inch tape (as opposed to the full-professional format of eight tracks on 1-inch tape), the accessory DBX noise-reduction option should be given serious consideration. With it, the 80-8 becomes formidable indeed-and well worth the attention of anyone who has discovered that two or possibly four tracks are just not enough. The nationally advertised value is less than \$3,200.

CIRCLE 123 ON READER-SERVICE CARD

AST DMX-1. AST, long a supplier of concert sound-reinforcement equipment and disco systems, has come out with their own product line, starting with this innovative new stereo mixer/preamplifier. It is innovative because it has three sets of stereo turntable inputs. Why three? According to the boys in the back room. "Sound effects. man!" Say you're going to segue from turntable one to turntable two, but you'd like to inject a little personality into the proceedings. By depressing PROGRAM SQUELCH, you can make the "your-car-is-parked-infront-of-the-fireplug" announcement over a police siren that is playing on turntable three. All this without having to hold the next record between your teeth.



AST DMX-1 Stereo Mixer/Preamp

Aside from three turntable inputs, the DMX-1 has stereo tape deck and microphone inputs, each with its own volume control, and the mike input has its own equalizer. Operating features include complete program equalization in three bands, slide faders for smooth segues. PROGRAM SQUELCH for program lowering in talkovers, a headphone jack with separate volume and tone controls, and two sets of outputs with separate volume controls. The back panel has an accessory jack for tape, reverb, or echo. The DMX-1 is lightweight. compact. and fully portable, making it ideal for mobile discos as well as in-house operations. Manufacturer's price is \$575.

CIRCLE 121 ON READER-SERVICE CARD FRED MILLER

The Switchcraft Q-Chek Cable Tester. This is a 4 by 5 by 111/2-inch box containing enough plugs and jacks to test just about any cable in popular use today. Both ends of the cable to be tested are plugged into the appropriate connectors, and the series of pushbuttons is depressed. one at a time. When the active pushbutton is illuminated, a proper connection is indicated. Cables with faulty wiring are revealed when the wrong light comes on.



Switchcraft Q-Chek Cable Tester

For example, a short circuit will illuminate two or more lights, an open circuit will illuminate no light, and a crosswired cable will light a button other than the one depressed. Switchcraft states that the basic tester will check up to 180 different combinations, and a set of adapters can raise that number up to 350. The Q-Chek's suggested price is \$162; with the set of seven adapters, it is \$186.

CIRCLE 122 ON READER-SERVICE CARD JOHN WORAM

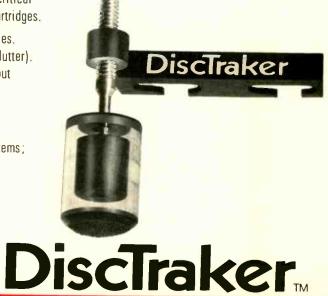
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## The 1977 Multi-Track Expo

### by John Woram

The world of semipror recording has expanded at a remarkable rate over the last few years, and finally someone has had the good sense to launch an exhibit of recording studio hardware geared specifically toward this evergrowing market.

That someone is Dave Kelsey, president of Audio Concepts. Inc., a Hollywood outfit catering to the needs of the advanced amateur and the semipro recording engineer. The exhibit. "1977 Multi-Track Expo." was held in April at the Los Angeles Convention Center. where some thirty manufacturers were on hand to demonstrate their wares to interested visitors.

According to Kelsey, the expo was designed to appeal to the person interested in learning a little more about the recording hardware and technology currently available. It was an idea whose time had long since come, for from AKG Acoustics to Yamaha International the exhibit booths attracted some 4.500 registrants.

In addition to the exhibits, lecturedemonstrations were conducted by various manufacturers and audio consultants. Several times daily, the Ampex Corporation presented a slide show entitled "Magnetic Tape: Design and Application," covering the basics of tape manufacturing and user applications. In a nearby room, AKG Acoustics offered a seminar on "Microphone Theory and Application." Down the hall, 16-track mixdown techniques were reviewed, and in still another room, ABC Records' Brian Ingoldsby chaired a panel discussion on "Recording Fundamentals." Yours truly pinch-hit for Doc Siegel on the subject of microphone applications. Teac/Tascam offered a basic workshop on "The Musician's Home Studio." the Electro-Voice people discussed studio monitors, and DBX representatives presented "Noise Reduction: Theory and Application." Other seminars covered equalization, digital delay applications. electronic music, and independent recording. And to tie it all together, acoustics consultant Jeff Cooper presented a detailed seminar in recording studio design and acoustics.

The exhibitors list included some companies formerly regarded as "for professionals only," and some that have developed over the past few years exclusively to meet the needs of the semipro recordist. Well known in professional circles. Ampex and Scully were both on hand with tape recorders in the under-\$2,000 category. Ampex's ATR-700 is built to the company's specifications by Teac. and Scully's 250-2 is a simplified version of their well-known 280-series professional recorder. Both machines accept 10½-inch reels and are available in 15 ips half-track stereo formats.

Teac, the folks generally credited with starting the semipro revolution, introduced their new Tascam series 40-4, a 4track, ¼-inch tape recorder that will be available later this year.

Where will it all end? It probably won't, for it seems as though every month a new supply of semipro hardware emerges. We'll keep you posted in "Input Output."



Teac's Dick Rosmini conducts a workshop on the home studio



Dave Kelsey, president of Audio Concepts and founder of the Multi-Track Expo



The Orban/Parasound exhibit



LES BAINES KEN EMERSON TODD EVERETT DON HECKMAN JIM MELANSON

JOHN STORM ROBERTS SAM SUTHERLAND NICK TOSCHES JOHN S. WILSON

## **Gregg Allman: The Fink Has Soul**

by Les Baines

The Gregg Allman Band: Playin' Up a Storm. Lenny Waronker & Russ Titelman, producers. *Capricorn CP 0181*, \$6.98. Tape: M 50181, M 80181, \$7.97.

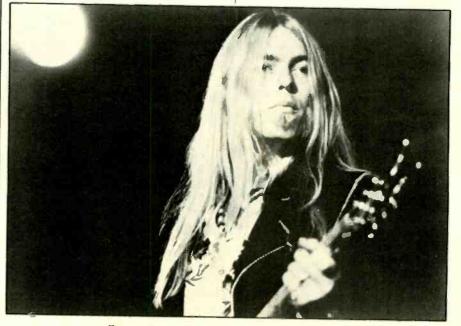
Sometimes the more things stay the same, the more they change. Take Southern rock. If there is one genre of mid-Seventies music that has seemed entrenched and reduced to formula comparable to the worst cybernetic synthesizer doodles, that is it. The Allman Brothers were brilliant, but post-"Brothers and Sisters" both they and their progeny have been walking in a lockstep defined by steel guitars, recycled blues, and lyrics about how hard it is to be a country boy so far from home.

Southern rock initially sold itself on a populist sentiment: We from down home, we talk straight and play upright funk, we may be narrow but, lawd, we are righteous. There was a poetry in the Allman Brothers' delivery of that message, a bully's bluster in Lynyrd Skynyrd's, and a distinct whiff of ersatz in everybody else's that followed. I don't care if you're honest and plant your own corn-you're getting boring.

Now the Allman Brothers have broken up, and as the Marshall Tuckers and Elvin Bishops sweep up the arenas, the time has come to call for an accounting. What hangs in the balance is which splintered brother is going to carry on the tradition most straight-shouldered and, indeed, whether the tradition itself can long continue. One the one hand we have Dickey Betts, Duane Allman's flamin' fretboard successor. He's a strong hunk of human Georgia pine who, in person, still conveys a man's sense of dignity and all that the Aliman Brothers always stood for. Dickey plays some mighty tasty guitar, and he is damn proud, if a little grim. In the other corner is Gregg Allman, a self-confessed exjunkie whose well-publicized ins and outs with Cher kept him stranded at the L.A. airport often enough to make the Allman Brothers' last studio album the limp mess it was. Gregg Allman, who testified against a friend in a drug trial last fall and sent him up the river for the next seventy years just to spare his own miserable hide a little pain. What a fink.

But now the final results of the post-Allman labors are in, and, surprise—it's the fink and not Mr. Righteous who emerges as the better blues singer and all-round standard-bearer of whatever tradition is left. Dickey Betts's recent album, "Dickey Betts & Great Southern" (Arista AL 4123). was a bland little item, cut by a bunch of good old boys who perhaps know their formula a little too well. Gregg Allman's "Playin' Up a Storm," on the other hand, is a gritty sluice of undiluted blues and unconcealed personal pain. Its rockers, like Let This Be a Lesson to Ya, have real bite and energy. And when Gregg sings Ray Charles (*Brightest Smile in Town*), he becomes the first white blues singer to approach the master on his own ground. In fact he comes so close to matching Charles' peaks that he sounds better, more soulful, than Charles does today.

The final cut, One More Try, is an autobiographical lament so effective that it's almost cinematically moving: "Well, I'm goin' to California/tomorrow or today/I'm goin' there just to warn ya/that you're still alone, baby...."There is no little irony in this. A white punk fink singing the blues to Cher's sequins: a kind of central joke that might help explain the Seventies to future generations. But Allman transcends the joke by singing and playing with real passion and letting you know that the blues has always been about displacement, that you're always singing your father's song in a strange land however much the Marshall Tuckers might claim otherwise. Nobody wants to go home anyway; it's just a sleepy bore. The trouble with Southern rock, the factor impeding its development, has so far been that the practitioners are resolute: Upon this cowplop will I build my church, and no other. But Gregg Allman is just a country boy lost in that big ol' dirty city, singin' the blues. "Playin' Up a Storm" is not



Gregg Allman: singing the blues to Cher's sequins

only a great album, it poses a case of living folklore: a Huckleberry Finn saga for the Seventies.

The Beatles at the Hollywood Bowl. Voyle Gilmore & George Martin, producers. Capitol SMAS 11638, \$7.98. Tape: ●● 4XT 11638, ●● 8XT 11638, \$7.98.

The Beatles Live! at the Star-Club in Hamhurg, Germany; 1962. Larry Grossberg. producer. Atlantic LS 2-7001, \$13.95 (two discs). Tape: CS 2-7001, TP 2-7001, \$13.95.

Perhaps because their career was measured in singles and albums that became calendar markings for a generation, the Beatles have largely remained ciphers as live performing artists. Their concert tours were modest compared to the transcontinental odysseys commonplace among rock bands today, and most of the shows themselves were very brief. In addition, what memories most Americans have of those mid-Sixties tours are likely lit more by gesture than substance, for the unrelenting white noise of fullthroated Beatlemania insured that all but the most obvious details of performance were lost somewhere between the stage and the first row of seats.

In view of the uncertainty about their early stature, the release of two separate live albums may inspire as much anxiety as curiosity. The Beatles were viewed as recording innovators above all else their records so central to '60s rock orthodoxy that their own technical virtuosity seemed beside the point. Confronted with evidence of their playing without the benefit of studio technology—which they employed more dramatically than any of their peers—would we in fact hear a rather commonplace band?

In terms of pure musicianship, the band was, indeed, still rough-edged and stylistically limited. But the singing is never tentative or detached, and the playing, however confined by technique, is never utilitarian. There is a raw energy that surfaces on these recordings. On "The Beatles at the Hollywood Bowl," far and away the superior of the two albums, the sheer exuberance of the vocals is sufficient reminder that the spirit and intelligence of the band were constants. Of the twelve tracks, six were No. 1 singles in their recorded form, and the live renditions certify those songs as classic arrangements, not just classic records. And although producer George Martin is careful to detail the technical limitations of the original taping, John Lennon and Paul McCartney both emerge as far more exciting vocalists than we might expect, given the Sisyphean task of competing with the crowd's adoring roar.

Martin and remix engineer Geoff

Emerick have succeeded in keeping that din at bay, but it still manages to register a continuous background whine throughout the record. At first, the effect is rather surreal. But the ebullience of the music itself combined with Martin's virtually seamless and energetic pacing of rock & roll classics gradually build up a literal rush in the performance.

The ambience of the Hollywood Bowl performances was quite the opposite of that at the Star-Club (see page 101 for story). That LP accurately reflects the seamy atmosphere of the Reeperbahn (the red-light district) in the rowdiness and occasional disinterest of the crowd. as well as in the acoustic environment of the tape. Vocals are intermittently buried, and two of the album's songs-Be-Bop-A-Lula and Halleluja, I Love Her So-offer a comic highlight in a guest solo by Horst Fascher, apparently a popular waiter at the club based on the crowd's approving roar at the beginning of the track. The song selection is curious, especially compared to the familiar hits of the Bowl shows. But in 1962 the Beatles were virtually unknown, and their Hamburg engagements-exacerbated by surly audiences-demanded grueling hours of playing and a large repertoire. This explains why such curios as Frank Ifield's 1 Remember You and Marlene Dietrich's Falling in Love Again are placed alongside the Chuck Berry and Little Richard chestnuts that later became regular features of the band's early studio albums.

These factors make the two-disc Hamburg package attractive primarily to collectors and the most devout of Beatlemaniacs. Yet there are several performances here that may offer a more sharp-edged portrait of the band than anything on the Capitol compilation, if only because the Hamburg crowd rarely hints at the enthusiasm that later became an automatic response to the band. The arrangements of A Taste of Honey and Kansas City are virtually indistinguishable from their later studio renditions, as are most of the other songs that would later be recorded. As on the Hollywood Bowl album, the Beatles' finesse as both soloists and choral singers shines through, especially on softer performances. But unlike the other LP, the length of the performances and the recording quality result in some weaksounding vocals as well.

Most listeners will probably prefer the Hollywood Bowl set, and it is likely to emerge as a classic live album. Both LPs remind us that George Harrison had yet to master a consistently powerful solo style, that Ringo's drumming was often fairly loose, and that before they became social critics and verbal surrealists the Beatles were unabashed romantics plugging the oldest and safest of song topics. Ultimately, though, these early performances are more persuasive as testament to the charismatic freshness of their writing and performing on even the most primitive material. They played as if they meant it, and it is that urgency that powers both of these historic recordings. S.S.

#### John Cale: Guts. John Cale, producer. Island ILPS 9459, \$6.98. Tape: •• 2CI 9459. •• Y81 9459, \$7.98.

When I hear John Cale's work with the Velvet Underground of the late Sixties, I hear something effete. When I hear his solo work of the early Seventies, I hear something pale and frigid. There is just no place in rock for the coolly and clinically artistic; there never has been.



John Cale-getting away from Art

This album, cut more than a year ago, is Cale's first worthy rock & roll. The artschool posings are gone, and the droning Cyborg tones are replaced by waves of good, hard rhythm.

The influence of Jim Morrison is here, especially in *Mary Lou* and *Dirtyass Rock 'n' Roll*. (In the latter, Cale sounds so much like Morrison it's spooky.) Of all the rockers who reached out for something in the late Sixties, Morrison is the only one who touched it; it seems right and good that so much of what is currently exciting—from this album to Iggy Pop's *Metallic KO*—bears the mark of the Lizard King.

Cale's version here of *Heartbreak Hotel* is a rare instance of someone improving on an Elvis work and is comparable to Billy Swan's rendering of *Don't Be* 

> Explanation of symbols Cassette 8-Track Cartridge

### B

Cruel. In Helen of Troy, Cale gives a picture of Helen as Queen-Bitch of Ilium—a picture that succeeds as both rock & roll and history. Guts owes as much to Boris Pickett as to Hubert Selby Jr. Gun is such a great, odd song of moral-less violence that Don Siegel should make a movie out of it. Forget your preconceptions of John Cale. This is not Art. This is good stuff. N.T.

#### Charlie: No Second Chance. Terry Thomas & John Anderson, producers. Janus JXS 7032, \$6.98. Tape: ••• H5 7032, •• H8 7032, \$7.98.

"No Second Chance" is the second album for Charlie, an English quartet so well concealed until now that most of the people who buy "NSC" will view it as a debut. The first album was released less than two years ago by Columbia and virtually sank into oblivion without a trace. But I suspect a lot of folks will be looking for it now, because the current work is a stunning rock success. Terry Thomas, an English singer/songwriter, is lead guitarist and coproducer for this set, and his success in adopting familiar American pop styles and using them expertly is the basis for Charlie's appeal.

As such, Charlie's music treads dangerously close to mere replication. The title song and Johnny Hold Back draw much of their instrumental fire from the same concise arranging style that has, until now, been the domain of Steely Dan. On Johnny, Thomas employs virtually the same sax and guitar interplay the Dan used in My Old School to underscore the bitter urgency of the lyric. What saves this song, and most of "No Second Chance," from lapsing into wholesale impersonation is Thomas' singing, which breaks from the mimetic tide of the playing in its slightly rasping, clearly English flavor.

Thomas' point of view is also divergent, if not always unified. While an acerbic, nearly cynical cast to the aforementioned titles darkens some of the album's best moments, he is also fond of richly melodic pop songs whose lyrics passionately declaim his romanticism. Turning to You is the best of this type and demonstrates why Charlie may well establish itself alongside its better-known influences: Thomas and bassist/coproducer John Anderson turn in lush harmonies that evoke The Byrds and C.S.N & Y and build toward a dramatic modulation near the fade that is nicely highlighted by Anderson's single, emphatic shift in the bass line. Such touches are hardly groundbreaking, but they are executed with a canny, confident precision that makes the songs as irresistible as they are safely commercial.

Julian Colbeck's organ and electric piano provide more texture than melodic shape, and drummer Steve Gadd (an Englishman, apparently, and not the well-known New York percussionist) balances his hard-rock drumming against a lighter, more fluid attack well suited to the album's love songs. To the

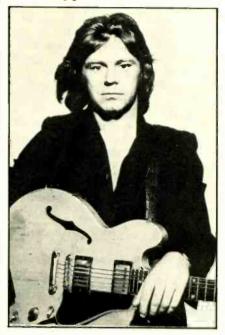


Charlie-approaching Steely Dan ground

basic quartet, the producers have sparingly added Peter Zorn's sax parts. Martin Smith's occasional guitar, and Richard Burgess' percussion. For a selfproduced effort, "No Second Chance" is especially impressive, achieving a sonic clarity and depth that in no way dilutes the punch of Thomas' hot guitar and salty vocals on the uptempo tracks. s.s.

#### **Dave Edmunds: Get It.** Dave Edmunds, producer. *Swan Song SS 8418*, *\$6.98. Tape: CS 8418*, *. TP 8418*, *\$7.97.*

Back when the Rolling Stones were auditioning guitarists, a bunch of us fel-



Edmunds: the consummate rocker

lows decided that the prime candidate was Dave Edmunds. He's a superb rock guitarist, doubles well enough on piano, bass, and drums, sings better than many better-known figures, and has had some success as a record producer. His abilities in the studio are legendary in certain circles, and his knowledge of music is encyclopedic. We decided that only one thing would keep him from being the perfect new fifth Stone-Edmunds is too smart to hang out with that over-the-hill gang.

And so we waited. This is Edmunds' third album since leaving Love Sculpture several years ago (the first, on the heels of his *I Hear You Knockin*' hit single, and second, last year's "Subtle as a Flying Mallet," are worth any amount of search and money). In addition to the attributes mentioned above, Edmunds is the consummate rocker. The LP jumps from beginning to end, pausing only briefly for a rendition of *Where or When* that does justice to Dion and the Belmonts' Sixties reading. He delves into the rock files for obscurities once covered by Gene Vincent (*Git It*) and Jerry Lee Lewis

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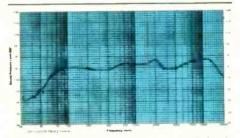
Two 3½" cone midranges give excellent power handling and eliminate break-up in the critical midrange region. Tuned isolation chambers control response at the low end of the midrange spectrum. They also provide acoustical isolation in the cabinet between the midranges and the woofer. An edge damped rim suspension with specially treated molded cone offers sharp, clear, midrange reproduction. A 1½" Mylar<sup>®</sup> rear damped hemi-

A 1<sup>1</sup>/<sub>2</sub>" Mylar<sup>®</sup> rear damped hemispherical dome tweeter offers a dispersion of 170<sup>°</sup>. Its large-lightweight voice coil gives high power handling, yet maintains a low mass for good high frequency reproduction.



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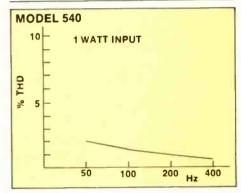
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For further information and name of your nearest authorized Spectrum Dealer, write to: Jensen Sound Laboratories, Dept.HF-87,4136 United Parkway, Schiller Park, Illinois 60176.



B

(Let's Talk about Us) with the inclusion of more obvious numbers like Hey Good Lookin' and My Baby Left Me. And he chooses brilliant contemporary pastiches that fit into the same rich vein: Bob Seger's Chuck-Berryish Get Out of Denver, Nick Lowe's similarly Berrylike I Knew the Bride (When She Used to Rock and Roll), the rockabilly What Did I Do Last Night, and Edmunds' own Here Comes the Weekend (like the Everly Brothers with a Duane Eddy guitar solo that says more in eight bars than Aerosmith could on an entire album). There are clever touches like the Cajun accordion that appears briefly and effectively in the middle of Juju Man and the standup bass on My Baby Left Me. It's all a genuine delight.

A friend and fellow Edmunds freak phoned me after his first hearing. "Throw away all of your other records," he said. "This is *the one.*" I know how he feels. But I'm also hanging on to Edmunds' previous releases. Together, they comprise all that anyone needs to know about rock & roll. T.E.

Heart: Little Queen. Mike Flicker, producer. Portrait PR 34799, \$6,98. Tape: ■ PRT 34799, ● PRA 34799, \$7,98.

One successful debut is rare enough for a recording group in the Seventies. But when it happens twice to the same group, take notice.

Heart traces its roots back to Vancouver, B.C. After four years of duespaying, they landed a contract with the independent Canadian label Mushroom and, in 1976, released "Dreamboat Annie." The album was a virtual showcase for Ann Wilson's vocal skills, as well as a compositional tour de force for her and her sister Nancy. Magic Man and Crazy on You proved strong favorites to both Canadian and U.S. listeners, and the LP went platinum in both countries. A remarkable feat, considering the marketing/distribution capability of the small label. The lesson wasn't lost, and soon thereafter the group signed to CBS' fledgling Portrait label. "Little Queen" is their first release with CBS

Those who found "Dreamboat Annie" a turn-on might switch off to "Little Queen." Others will point to this effort as the real starting point for the group. Hard-core fans will consider it a musical progression from their first. In any case, "Little Queen" is assuredly a different direction, so much so that it could be called a second debut.

"Dreamboat Annie" carried an easygoing pop/rock musical message, prompting comparisons of Heart to the likes of Fleetwood Mac. Ann Wilson, critics said, could match note for note the singing talents of either Christine McVie or Stevie Nicks. The material at its best

was a notch below Fleetwood's but good enough to stand on its own. While musicianship was probably the major flaw in the comparison. Heart's playing was generally clean and tight. But "Little Queen" should stall further parallels to the L.A.-based supergroup. Gone for the most part is the popsy feel. Heavier rockguitar lines and arrangements seem to emphasize the group's identity as a unit. rather than as a backup for Ann Wilson's flowing vocals. Lead guitarist Roger Fisher's more than occasional writing credits probably account for much of the change. And the variety of material is also greater: reggae in Say Hello, quasiheavy metal in Little Queen and Barracuda, more of what you might have expected from the group on Treat Me Well, and some good of' Seventies rock on Kick It Out.

Already a strong concert attraction in a second billing slot (expect that to change shortly). Heart's a safe bet to go a long way off this latest effort. J.M.

The Hollies: Clarke, Hicks, Sylvester, Calvert, Elliott. The Hollies, producers. Epic PE 34714, \$6.98. Tape: •• PET 34714, •• PEA 34714, \$7.98.

The Hollies are prophets without honor in their own era. After all, they had a patexpressed here is an exhilarated (and exhilarating) delight in their own mastery of pop sound. All but one of the Hollies are in their mid-thirties, but their craftsmanly command has scarcely slipped. The callow vocals on My Love could have been recorded ten years ago, and age hardly impedes the rushing rock of 48 Hour Parole and Russian Roulette. They've retained their versatility (Thanks for the Memories is a shimmering samba), and their high harmonies on a song like Star can still sweep you off your feet. This last number and several others comment, sometimes only between the lines, on the groups' reduced circumstances; it's their only concession, poignant and occasionally self-pitying, to changing times.

Though "Clarke, Hicks. Sylvester, Calvert, Elliott" proves the Hollies are far from over the hill, it isn't among the peaks in their career, either. They haven't lost their touch, but they *have* lost (or dismissed) Ron Richards, their producer from the very beginning. In his absence this altogether pleasant record falls short of their very best. K.E.

Elmo Hope: Last Sessions. Herb Abramson & Irv Kratka, producers. *Inner City 1018*, \$6.98.



The Hollies: Bernie Calvert, Tony Hicks, Allan Clarke, Terry Sylvester, Bobby Elliott

ent in the '60s on precisely the sort of silly, scintillating pop music that has made Elton John, ABBA, and so many others such successes in the '70s. But the Hollies' fortunes have sunk so low that Epic, their American label, has declined to release their last three albums. "Clarke, Hicks, Sylvester, Calvert, Elliott" has been culled from two of these ("Right On" and "Russian Roulette," both released by Polydor in England). along with a gorgeously schlocky version of Bruce Springsteen's Sandy, which made its first appearance on their last U.S. LP, "Another Night." Though the quality of these performances varies, it's much too high to justify the shabby treatment the group has received.

As always, almost the only emotion

Every decade seems to produce at least one highly distinctive jazz pianist with an accessible style that somehow doesn't cut through the contemporarily fashionable sounds to achieve audience acceptance. In the Fifties, the late Herbie Nichols was such a pianist. Currently, Barry Harris fits the mold. In the Forties, Thelonious Monk went through it before firmly establishing himself as something more than "weird." In the Sixties, it was Elmo Hope (who died in 1967), playing with a dry wit and a clean, honest directness that set him apart from his peers.

Hope's playing had, as Larry Kart has observed, an "oblique and vulnerable beauty." His discography is not extensive-a dozen LPs under his own name, Continued on page 118

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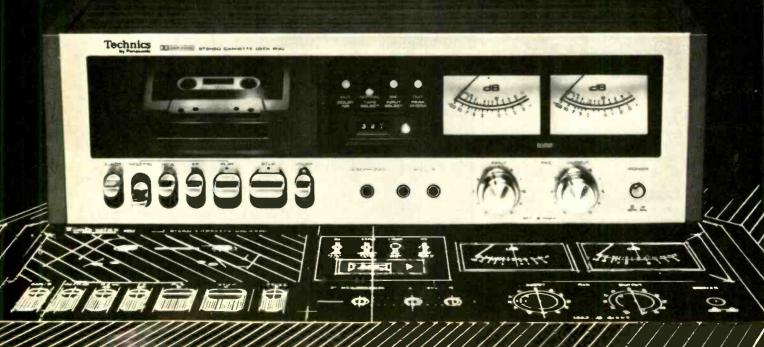
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## John Coltrane & Eric Dolphy: The Vanguard Years

### by Don Heckman

T he late Fifties and early Sixties were watershed years for jazz. They represented the end of the bebop era and the arrival of what must be described—unhappily—as the lost generation of jazz. Of the many musicians who were in the vanguard during those years, musicians whose creative achievements are still virtually unmeasured, only John Coltrane has broken through to a large audience.

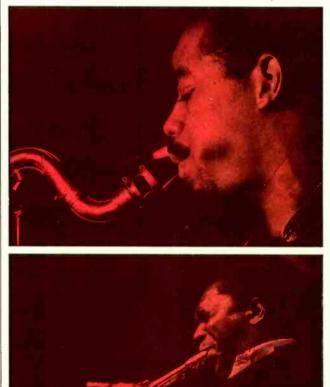
But Eric Dolphy, his companion on the Impulse recordings, was arguably Coltrane's equal, both as an innovator and as an improviser. Dolphy's premature death in 1964 makes his possible development forever a mystery, of course. but this observer is prepared to go out on a limb and say that he would have been the most significant jazz saxophonist since Charlie Parker. That is not to say that Coltrane had a complete opportunity to develop either, since he died three years after Dolphy, at the age of fortyone. Fortunately, both left some of their music behind-not enough, to be sure, but a welcome gift, nonetheless.

One cannot listen to this music without experiencing a great deal of distress. Distress at the great loss and at the realization that Coltrane's and Dolphy's improvising is, almost without exception, vastly superior to anything that is being done by contemporary jazz players. Coltrane has been ripped off by practically every young tenor saxophone player who has put horn to lips in the last decade. But that's not quite the same as duplicating his creativity. If anything, hearing seminal developments in his playing between the early Prestige recording (1957) and the later ABC Impulse dates with Dolphy (1961) makes one wish that his imitators had gone in search of a more accessible model.

And Dolphy-well, Dolphy is unexplainable; he simply must be heard. I can think of no one who has seriously tried (with any sort of success) to mimic his style on any of the three instruments-alto sax, flute, and bass clarinetthat he played with such incomparable originality. The reason, no doubt, is that what he plays would be fiendishly difficult to execute even if it were meticulously transcribed, much less improvised.

The Prestige Dolphy set is a specially priced twofer that includes two previously released albums recorded in 1960 and '61: "Here and There" (Prestige 7382) and "Eric Dolphy in Europe, Vol. 2" (Prestige 7350). The album opens with a bang, Dolphy soaring through an extended interpretation of Mal Waldron's *Status Seeking*; one would be hard put to find a more provocative jazz improvisation. He follows with a rarity for a wind instrumentalist: an unaccompanied bass clarinet solo based on Billie Holiday's *God Bless the Child*. The two sides recorded in Europe suffer from the rhythm section's predictably poor understanding of what Dolphy was doing. But two cuts of *Don't Blame Me* allows an interesting opportunity to compare his flute soloing on different takes. On the final track, *April Fool*, he plays flute with a stellar rhythm section of Jaki Byard, George Tucker, and Roy Haynes; it was his first date for Prestige, made on April 1, 1960.

Coltrane's work on "Wheelin'" dates from 1957. The two discs in the bargain package were originally released as "The Dealers-Mal Waldron with John Coltrane" (Status 8316) and "Wheelin' and Dealin'" (Prestige 7131). In 1957 Coltrane was just finishing up an important stretch with the Miles Davis quintet; later that year he was playing at New York City's Five Spot in a memorable collaboration with pianist Thelonious Monk. Clearly, it was a year in which he was coming into his own as a major tenor saxophonist. Heard from a distance of twenty years, his playing still sounds fresh, alive, and contemporary. Not so for most of his associates, especially tenor saxophonists Paul Quinichette and Frank Wess. The surprises of the recording are pianist Mal Waldron and alto saxophonist Jackie McLean; both play the familiar bebop idiom with an inventiveness and creativity that was not exactly common in the late Fifties.



Eric Dolphyarguably Coltrane's equal, both as an innovator and as an improviser.

The legendary Coltraneone wishes his imitators would look for a more accessible standard

But the star of the date is obviously Coltrane. It seems almost impossible to believe that he was often reviled in those years for playing too long and too chaotically, for taking too much time to develop ideas that were often thought to be beyond his grasp. For within the confines of these fairly unstructured "blowing" sessions, Coltrane plays with surprising conservatism. As with all musical revolutionaries, he was forced to fit his adventurous rhythmic and harmonic ideas into a framework that was not particularly supportive. Ironically, even with the often unsympathetic backing he receives, it is Coltrane the adventurer, rather than Ouinichette the traditionalist, who manages to bring the music together. True, this was only the beginning of Coltrane's "out" period, but it was an auspicious forecast of things to come.

Coltrane and Dolphy worked together-for the record, at least-only once, in a group that played a now-historic engagement at New York City's Village Vanguard in November 1961. Material from that date has been included in at least two previous albums that I know of: "Coltrane Live at the Village Vanguard" and "Impressions," both on Impulse. This collection, not previously released, is considerably more extensive: an additional benefit is the inclusion of alternate takes of India and Spiritual, two selections from the earlier recordings. Also included are further explorations of two Coltrane classics, Greensleeves and Chasin' the Trane, as well as an extended, untitled Coltrane original.

Encounters like this, summit meetings between supercreative talents, always tend to make critical commentary superfluous. The usual problems that one might mention-the mushy quality of the sound, the failure of the bass (and bassists, on some tracks) to support what is happening, the occasional moments of confusion about who is going to play next-all seem irrelevant in the glow of the Dolphy/Coltrane improvisations. Certainly the stimulation that each provides the other is in no way less remarkable than such classic exchanges in the past as those between Charlie Parker and Dizzy Gillespie or Louis Armstrong and Earl Hines. This is a recording that will richly repay every moment spent with it.

John Coltrane: The Other Village Vanguard Tapes. Esmond Edwards, producer. *A BC Impulse A SD 9325*, *\$8.98*. *Tape:* A S 9325-C, A S 9325-T, *\$9.95*.

Eric Dolphy: Status. Esmond Edwards, producer. Prestige P 24070, \$7.98.

John Coltrane: Wheelin'. Bob Weinstock. producer. Prestige P 24069, \$7.98.





CIRCLE 15 ON READER-SERVICE CARD



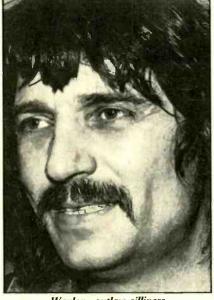
#### Continued from page 114

plus another handful as a sideman. This set represents his last recordings, which were made in 1966 but not released until now (Hope's typical frustrations pursuing him to the grave and beyond). If it does not exactly sum up his playing—a difficult thing to do on one LP—at least it indicates why he deserves to be ranked among the most distinguished jazz pianists of the post-World War II era.

The most striking evidence is *Tooth-some Threesome*, the epitome of everything a blues should be: clear, direct, and uncluttered, with colors ranging from moody reflectiveness to dreamy flotations. All the elements, the energetic and visceral stirrings, fit snugly and logically together. At the opposite pole is *Punch That*, a lightly swinging melody that builds in tension as Hope runs in and out of John Ore's bass lines; the cut eventually manages to imply a swing band in full cry, riffing out calls and responses.

All through the disc, Hope's melodies run on blue, angular lines that initially suggest Monk but tend to emerge into a brighter, sunnier scene than that composer/pianist usually sketches. J.S.W.

Waylon Jennings: Ol' Waylon. Chips Moman, producer. *RCA APL 1-2317*, \$6.98. *Tape*: ●● *APK 1-2317*, ● *APS 1-2317*, \$7.98.



Waylon-outlaw silliness

There are problems. Luckenbach, Texas (Back to the Basics of Love) is a bad song, a fan letter to Waylon and Willie Nelson from Waylon and Willie Nelson. If these guys don't stop cooing to each other, somebody's gonna think something's funny. But I guess that's what being an Outlaw is all about: making goo-goo eyes at yourself in the mirror. Pass the Lone Star, Red.

But Waylon is making fine music, as he's done all along. Unlike most country stars, the center of his work is rhythm. He is not a subscriber to the Dying Metaphor of the Month Club ("Your warm and tender body next to mine," etc.), and he knows that rock & roll is just the bastard baby of country music. The outstanding moment here is the Medley of Elvis Hits (never mind that the medley consists of only two songs, That's All Right and My Baby Left Me, and that only the latter was a hit). This is Waylon at his rockabilly best. After all, isn't rockabilly what it's all about? Outlaws run and hide when Jerry Lee comes around. Till I Gain Control Again is a solid, melodramatic performance, written by Rodney Crowell, Los Angeles' favorite hillbilly. Brand New Goodbye Song is nice and nasty, and This Is Getting Funny (But There Ain't Nobody Laughing) is one of Waylon's best party songs to date.

Waylon's great, but the Outlaw silliness is waxing rotten. No more cuts like Luckenbach, Texas (Back to the Basics of Love). Instead something like: Beaumont, Texas (Back to the Basics of Sleaze). N.T.

George Jones: All-Time Greatest Hits-Vol. 1. Billy Sherrill, producer. *Epic KE* 34692, \$5.98. Tape: CET 34692, CEA 34692, \$6.98.

Aside from some of his work for United Artists in the early Sixties, George Jones spent the first fifteen years of his recording career within the perimeters of backward technology. A "studio" was actually a living room lined with cardboard egg crates, and the duties of the "producer" were limited to watching the clock and reminding the singer that each extra take was costing money. All that ended in 1971 when Jones signed with Epic and began working with Billy Sherrill—one of Nashville's consummate producers.

There had been so many great songs, though. Songs that shone loud and strong through coarse, insensate production; songs that can still be listened to simply for the thrillsome power of Jones's voice. (I am often tempted to capitalize the v in "voice" when writing about George—an almost religious urge. It is a voice the size of Homer's.)

In this album, George Jones and Billy Sherrill have taken some of those great songs and done them again. Most of the selections were hits, and all were first cut in the years 1955 to 1969. There are rockabilly killers like *Why*, *Baby*, *Why* and *White Lightning*, honky-tonk classics like *The Window up Above*, and lost-love songs like *She Thinks I Still Care*. There is a version of *The Race Is On* that is R

brilliant, bad-ass rock & roll, and a *Tender Years* that tells all that is right with country music. This is how it should have been, and now it is. It's as simple and as good as that.

Bob Marley & the Wailers: Exodus. Bob Marley & the Wailers, producers. *Island 1LPS* 9498, \$6.98. *Tape:* ●● 2C1 9498, ● Y81 9498, \$7.98.

Mighty Diamonds: Ice on Fire. Allen Toussaint & Marshall Sehorn. producers. Virgin PZ 34454, \$6.98. Tape: PZT 34454, • PZA 34454, \$7.98.

Peter Tosh: Equal Rights. Peter Tosh, producer. Columbia PC 34670. \$6.98. Tape: ●● PCT 34670, ●● PCA 34670, \$7.98.

Reggae must surely be unique in modern music. It began with party-party and



**Bob Marley** 

then took on religion. Basically, it stems from a blend of the Jamaican country music called *mento* (which supplied the kick on the fourth beat of the bar) and American rhythm & blues. Many of reggae's leading musicians are of the Jamaican back-to-Africa Rastafari faith, which reveres former Ethiopian Emperor Haile Selassie as its spiritual head. Since its members have other matters in mind than gettin' down, they have moved reggae toward a simple and at times almost austere "roots" style typified by "Exodus" and "Equal Rights." A comparison of their album titles pretty much sums up the difference between Marley's and Tosh's visions. Within the general prophetic vein of Rastafarianism, in which faith and politics are tightly entwined, Marley tends to mysticism and Tosh to activism.

The first side of "Exodus" is a kind of five-part Rastatarian symphony of psalms, with equally strong conceptual and musical progressions. It moves from the brooding apocalyptics of *Natural Mystic* ("Many more will have to suffer/ many more will have to die/don't ask me why ...") to the lengthy *Exodus*, whose sense of triumph and rebirth is accented by a fast, traveling beat in contrast to the earlier numbers' steady, marked time.

Marley is the modern reggae singer best known in the U.S. Peter Tosh was one of the founder-members of the Wailers and a chief architect of their sound and material. He has a more aggressive voice than Marley, and his messages are less cosmic. Downpressor Man is a diatribe of awe-inspiring power and control set to a melody reminiscent of British folksong, one of Jamaican music's sources. I Am That I Am moves from a deliciously pretty intro into a tough-minded statement of individualism that ends up with strong Messianic overtones. And the menacing Stepping Razor is a chilling warning in the old African-derived bragging-song tradition (not a threat to the innocent-Rastafarianism's hostilities are far from unfocused).

Like the great blues singers, Tosh and Marley make nonsense of the distinction between "popular" and "serious" music. Rastafarian reggae is as serious as any music being made today. But as the Mighty Diamonds' *Cat-o-Nine* and some of Tosh's and Marley's lighter tracks illustrate, there is more to reggae than religion. In fact the nicest thing about "Ice on Fire" is *Cat-o-Nine*, whose far-fromaustere melody and rhythm burst like a ripe mango with traditional Jamaican musicality.

Unfortunately, too much of the rest of that LP is wasted on American numbers like *Country Living* and *Sneakin' Sally Through the Alley*, which the group sings only competently. But then, perhaps it was too much to hope that an American producer would leave them alone to demonstrate the party-party aspects of reggae that Marley and Tosh mostly tend to skip. J.S.R.

The O'Jays: Travelin' at the Speed of Thought. Various producers. Philadelphia International PZ 34684, \$6.98. Tape: PZT 34684, PZA 34684, \$7.98.

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problems when it comes to aiming at a wider audience. Some sanitize their whole act, usually with limp results. Others broaden their repertoire, which is what the O'Jays have done—with mixed effect.

Most of the best tracks on "Travelin' " are in the gospel-based vein that has ruled their roost for many years (they just celebrated their twentieth anniversary). Those Lies Done Caught Up with You This Time is a punchy funk/soul number interwoven with slightly eviltoned and falsetto voices and a really rich palette of gospel-based harmony and polyphony. Even better is Stand Up, a from-the-gut, uptempo, gospel-style message song with tossing harmonies and tearing, swooping leads. Backed by a ringing organ, a driving bass, and inexorable drums and handclaps, Stand Up has soul in the only meaning of the word that matters.

Unfortunately, the Gamble and Huff penned/produced message songs too often suffer from mawkish lyrics. Travelin' at the Speed of Thought is musically effective with its simple synthesizer opening, eerie chorus melody, clean backing, and effective multiple tracking effects. But its lyrics sound as if they were written at the speed of thought and are as conceptually muddy as you'd expect. Similarly, We're All in This Thing Together has one of those catchy but nondescript melodies that the computers will be composing a few years hence, and the lyrics-on pollution and cooperation and such-have the Seal of Social Merit stamped all over them.

Most of the album is pretty much in the current r&b mainstream, with the exception of Feelings and Let's Spend Some Time Together. As far as I'm concerned, Feelings belongs in a tiny band of truly outstanding twentieth-century popular ballads. The O'Jays added it to their repertoire a few years back, looking for an outreach. What they have achieved is an outrage, blending almost every second-rate balladzak cliché in the book-overemotional rubatos and sustained notes, inappropriate Sweet 'N Low harmony ... words fail. Happily it gives way to a joyously funky Work on Me, a song with no redeeming social merit whatsoever, praise be.

Unlike *Feelings*, the other piece of outreach works totally, perhaps because it is out of the O'Jays' own heritage. *Let's Spend Some Time Together* is a shoobiedoo close harmony ballad with threadof-gold muted trumpets and sleepyshuffle rhythm. It takes bits from the earliest doowop and pieces from the Ink Spots and is totally beguiling for all the unquantifiable reasons that are at music's heart. J.S.R.



#### Tab Smith: Because of You. Leonard Allen, producer. Delmark 429, \$6.98.

In the pre-Charlie Parker era, when the alto saxophone was defined by Benny Carter, Johnny Hodges, and Willie Smith, Tab Smith (no relation) surprisingly went unnoticed. With such a wealth of talent in the limelight, it may not seem unusual that another contemporary alto player was overlooked. But Tab Smith was not just another alto. Without ever losing his own identity, he managed to homogenize Hodges' strong, urgent singing quality on the blues, Carter's meticulous and airy lines, and Willie Smith's light, bubbling phrases.

Tab Smith spent almost a decade in well-known bands (two stretches with Lucky Millinder and almost three years with Count Basie) and was a vital spark in the brilliant little band that Frankie Newton led at the Cafe Society when Billie Holiday was establishing her reputation there in 1939 and 1940. From 1944 on, he led his own small groups, playing ballads and blues in black clubs. Despite all this, he has had little recognition.

Although "Because of You" may not be the best of Tab Smith, it is representative and, significantly, the only existing LP featuring one of the top pre-World War II saxophonists. These pieces were recorded between 1951 and 1955 and show both sides of his work in those later years. The title cut was his biggest hit-a slow, cloying ballad that illustrates one aspect of what his audiences wanted. But most of the selections are bright or gutty blues riffs. Trumpet, tenor (or two tenors), and a rhythm section provide the background over which Tab swings off into singing, soaring lines that sometimes leap from his customary lightfooted lyricism to an almost-growling visceral power. On In a Little Spanish Town, the band sets up a riff that projects Tab into his typical style-one that remained consistently fresh, no matter what his surroundings, from the early '30s to the early '60s, when he retired (he died in 1971). This is the work of an unusually distinctive saxophonist and its long overdue exposure via this disc is welcome. J.S.W.

#### Starland Vocal Band: Rear View Mirror. Milt Okun. producer. Windsong BHL 1-2239, \$6.98. Tape: 🖜 BHK 1-2239, 🝽 BHS 1-2239, \$7.98.

For evidence that it's occasionally possible to be both classy and commercial, one needs to listen no further than the Starland Vocal Band—though, admittedly, their slightly risqué single, *Afternoon Delight*, fits more into the second category.

"Rear View Mirror," the vocal/instrumental quartet's second album, is basically a repeat of their debut. The lead singing and harmonizing is nearly faultless, the material is for the most part admirable, and Milt Okun's production is crisp and reeking of good taste.

But Bill and Taffy Danoff, the Band's founders, sound held back by the tight format. Bill Danoff's is a sly wit, occasionally apparent here in some lyrics but far less so in his treatment of them. Taffy can belt the hell out of a song (listen to her performance of the Chantels' *Maybe* on Bill and Taffy's superb RCA "Aces" album of a few years back), but on "Rear View Mirror" she sings like a background vocalist allowed a solo spotlight.

Though Jon Carroll's vocal arrangements are often clever, and the instrumental work unusually unhackneyed, it is the material that stands out on this album. Bill Danoff has furnished a number of excellent songs that are less than startling melodically but do consistently demonstrate that he can write seriously (St. Croix Saturday Night is wonderfully descriptive) or humorously (Liberated Woman is both witty and politically acceptable-a neat trick). And the Danoffs' old friend and fellow District of Columbia folkie, Emmylou Harris, has contributed a stunning number, Norfolk, that ranks with her very best work. The instrumental arrangement, featuring twin dulcimers, merits special attention.

The ingredients are all there, and they're powerful. If the quartet can just loosen up, perhaps they can recapture some of the fun once generated by their stylistic predecessors, the Mamas & the Papas, and John Denver won't be able to make a hit out of a Bill Danoff penned/ recorded song as he did with *Baby*, *You Look Good Tonight*. T.E.

Gary Stewart: Your Place or Mine. Roy Dea, producer. RCA APL 1-2199, \$6.98.

#### Tape: ●● APK 1-2199, ●● APS 1-2199, \$7.98.

It's hard to resist Gary Stewart's hammy honky-tonk. Alcohol and adultery might be the most hackneyed of subjects, (how many albums can you make about getting sloppy drunk while your woman does you dirty), but Stewart's lubricious shudders and doleful quavers are so exaggerated that they turn many of his songs into exuberant parodies of country music conventions. And his narrow thematic range acts as a foil to his musical eclecticism. Along with the usual tongue-in-cheek tearjerkers, "Your Place or Mine" boasts souped-up bluegrass, abrasive slide guitar, and even ripping Dixie rock. The ironic interplay between lyric redundancy and instrumental versatility informs his work with an intriguing tension. At one and the same time. Stewart sends up country music and defies its limitations.

Unlike their rock counterparts, country artists have never been expected to change and grow with every record (which is one reason why their careers usually last longer). Reliability counts for more than revolution for a host of social, political, and cultural reasons. But Stewart's irreverence raises greater expectations which "Your Place or Mine" does not fulfill. The one new twist here is the addition of a female vocalist-Emmylou Harris on one track, and women who sound just like her on the others. Stewart wrote only two of the songs himself, and three are by Rodney Crowell, who definitely doesn't have a way with words ("Somewhat like a child she is at 42"). It's an immensely enjoyable album-Stewart sings with almost grotesque gusto and is backed by a crack band-but it also leaves you wishing, if not begging, for more. K.E.



Gary Stewart-lyric redundancy juxtaposed with instrumental versatility

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