October 1972

The B.A.S. does not endorse or criticize any product, dealer, or service. Opinions expressed herein reflect the views of their authors and are for the information of members.

<u>September meeting</u>. The September meeting was held on the 24th with about 50 members attending. The executive committee reported that a press release describing the BAS has been sent to about 50 daily, suburban weekly, and college newspapers. Extra copies are available for posting wherever you think they would do the most good. Treasurer Jim Brinton reported on the Society's financial status, which is limited primarily by the fact that only about 55 people have paid dues so far. The revised Constitution and the Bylaws of the BAS were discussed and adopted. The following officers were elected for one year -- president: Peter Mitchell; corresponding secretary: Joyce Brinton; recording secretary: Alvin Foster; treasurer: Jim Brinton.

Refreshments were provided through the efforts of Joyce Brinton, Jim Brinton, and Al Foster. Rather than form a Refreshments Committee to provide for each meeting, the members adopted Al Foster's suggestion that BU provide hot and cold drinks at each meeting (BU will charge about \$9 for preparing, bringing, and then disposing of the remains). Ann Schecter's suggestion, that we can fund this most painlessly if each member will donate a quarter when he or she partakes of the refreshments, was adopted.

Mike Wargo of Tech Hi-Fi gave a talk on Dolby noise reduction units for tape recorders, describing how the Dolby works and reviewing some of the differences among the units on the market. Noteworthy points: the Concord DBA-10 is less reliable than the Advent 101 and Teac AN-80 Dolbys in the \$130 class, and the Teac AN-50 may provide maximum performance per dollar, though it has measurably higher distortion than expensive units and is not compatible with all recorders. Jim Brinton pointed out that the new Signetics Dolby integrated circuit will require many external components in the circuit and so will not radically drop the price of Dolby units during the coming year.

Incidentally, Dick Goldwater and others have found that if a Dolby is used to obtain a signal-to-noise ratio of 50 or 60 dB, and a DBX 117 is also used (with a compression ratio of 1.2 in recording and an expansion of 1.2 or more in playback) it is possible to obtain far greater S/N ratios than with either the Dolby or DBX used alone, and with excellent, natural-sounding results.

Al Southwick gave a detailed discussion of considerations to be aware of when shopping for equipment. Some examples: the guarantee (and what is really covered by it); reputation for reliability; performance specs (and their credibility); whether a unit is designed to be economically serviceable; whether a dealer provides his own guarantee (if he does, he has to sell reliable stuff or servicing will wipe out his profits); compatibility with the rest of your system now and in the future; trade-in value; the word-of-mouth reputation of the dealer and his competitive performance (compare prices at several dealers); the price performance of the system; how the equipment fits your real needs and desires (do you really need an AM tuner? will you need an FM roof antenna? would the convenience of a cassette deck outweigh for you the nominal superiority of a reel deck?); speaker response versus room acoustics (how is your room furnished?); compatibility of the equipment with children, pets, or small apartments.

Recording seminar. To demonstrate and exchange information on successful live recording techniques, we have obtained (courtesy of Dennis Boyer) a concert hall, piano, and musicians, from 12 noon to 5 PM on Saturday, October 14. Bring your recorder, tape, mikes, cables, mike stands, extension cords and cube taps, and notes on good methods and ideas, to the concert hall at BU's School of Fine Arts, 855 Commonwealth Avenue, the first building beyond the BU bridge.

October meeting. The October general meeting of the BAS will be held on Sunday October 15 at 5:30 p.m. in Room 314 of the George Sherman Union at BU, 775

Commonwealth Ave. Enter by the basement entrance (on either the Commonwealth Ave side or the Storrow drive side of the building) and use the elevator at the rear of the basement corridor to reach the third floor. Andrew Petite, National Products Manager of Advent, is tentatively scheduled as our featured guest, to discuss the state of the art of cassette recording and comment on selecting microphones. Andy has been away on vacation so we cannot confirm his appearance as definite; if he can't make it, we will have some surprises.

A.R. tour. Thanks to Roy Allison's generosity, BAS members are invited to a factory tour at Acoustic Research, 24 Thorndike St., Cambridge, on Wednesday Oct. 18 at 9:00 a.m. Parking at AR or on nearby streets is scarce, so park at Lechmere Sales, walk up First St. toward Lechmere Sq., and turn left onto Thorndike. From the MBTA, go to Lechmere Sq., walk down First St. toward Lechmere Sales and right onto Thorndike. AR's offices are at the end of Thorndike on the left, on the corner of Second St.

<u>Demo record</u>. The British record "What is Good Recorded Sound?" has arrived. Get yours at the October meeting.

Meeting room. Thanks to Founder Al Foster's efforts our nomadic days appear to be over. We expect to have Sherman Union room 314 permanently available for monthly meetings and other activities.

Equipment exchange. On the premise that as we upgrade our systems we find ourselves with good used components to sell, Joel Sandberg has established a used equipment listing service. If you want to sell something, write down the make and model, plus your name and address and/or phone number; mail the notice to the BAS or give it to Joel or Peter Mitchell at the meetings. If you want to buy, Joel will maintain a file of available listings for inspection.

Clinic data. Attached is an article by Al Foster summarizing output power measurements obtained at local amplifier clinics. Be careful not to read too much into this survey. A few cautions: (1) Differences between closely ranked brands are not statistically significant. (2) An occasional aged or defective unit may have affected some of the scores; after all, some people may have brought amps to a clinic precisely because they didn't sound right. (3) These are averages across each brand line; so whereas AR makes only one amp and its rating here is unambiguous the low rating of Scott or Dyna may have been affected by inclusion of cheaper or older-design amps of these brands and might not apply to their best amps. (4) There are many brands, including much of the cheaper stuff on the market, which would have fallen below the bottom of Al's list had they been included; even the lowest rated amps here are still pretty good. (5) The full-power distortion curve isn't an amp's only important parameter. Keeping these points in mind, Al's survey should prove useful in interpreting advertised power.

Recommended records. Below we begin publishing the lists of records notable for outstanding performance or sound (or both) as recommended by members. Excuse the anonymi; not everyone signed his list. In coming months we expect to continue printing record recommendations, including in-depth discographies by several members who have collections of 500 to 1000 records each.

## J. K. Pollard

Bach: Suites for Orchestra. Harnoncourt, Concentus Musicus. 2-Tel. SAWT 9509/10.

Bach: Magnificat. Bernstein, NY Phil., Col. MS 6375.

Mahler: Symphonies #1-9. Bernstein, NY Phil. Columbia

Monteverdi: Vespers of 1610. Harnoncourt, Concentus Musicus. 2-Tel. SAWT 9501/02.

Mozart: Symphonies 35-41. Bruno Walter, Columbia Sym. 3-Col. D3S 691.

Shostakovich: Symphony #5. Bernstein, NY Phil. Col. 6115.

## Bob Cleary

Paganini: Violin Con. #3. Szeryng, Gibson, London Sym. Philips 6500 175.

Beethoven: Sym. #4; Leonore Ov. #3. Steinberg, Pittsburg Sym. Command 11016.

Beethoven: Sym. #9. Ormandy, Philadelphia Orch. Col. AS 7016.

Beethoven; Wellington's Victory. Karajan, Berlin Phil. DGG 139045.

Emerson, Lake, and Palmer: "Pictures at an Exhibition." Cotillion 66666.

Moody Blues: "In Search of the Lost Chord." Deram 18017.

## Anonymous

Berlioz: Requiem. Colin Davis, London Sym. 2-Phil. 6700 019.

Brahms: Violin/Piano Sonatas #2 & 3. Rubinstein, Szeryng. RCA LSC 2619.

Orff: Carmina Burana. Ozawa, Boston Sym. RCA LSC 3161.

Mahler: Das Lied von der Erde. Fischer-Dieskau, Bernstein, Vienna Phil. Lon. OS26005.

Prokofiev: Lt. Kije./Kodaly: Hary Janos. Szell, Cleveland Orch. Col. AS 7408.

Ives: 3 Places in N. E../ Ruggles; Sun Treader. Thomas, Boston Sym. DGG 2530 048.

#### Anonymous

Buxtehude: Organ Music. Jorgen Hansen. Nonesuch 71188

Bach: Chorale Preludes. Anton Heiller. Vanguard Cardinal VCS 10039/40.

Barber: Knoxville Summer. Leontyne Price, Schippers, New Phil. RCA LSC 3062.

Jimi Hendrix: "Electric Ladyland." 2-Reprise 6307.

Steve Miller: "Brave New World." Capitol SKAO 184.

# Anonymous

Duke Ellington: "New Orleans Suite." Atlantic 1580.

Chet Baker: "Baby Breeze." Limelight 86003 (discontinued). Good fluegelhorn, vocals.

Don Ellis: "Electric Bath." Col. CS 9585. Big band, fantastic tempos, elec. trumpet.

Don Ellis: "Tears of Joy." 2-Col.G30924. For good cartridges only. Big band.

Roland Kirk: "How Please Don't You Cry, Beautiful Edith." Verve 68709 (discontinued).

(continued next month)

## "McIntosh and Marantz Test-Clinics: What Do They Tell Us?"

If you are like most audiophiles you have probably wondered about the cumulative results of the Marantz and McIntosh Amplifier Test Clinics which are often hosted by local hi-fi retail dealers. And if you are like myself you have probably wondered what the clinics really tell us.

The Marantz and McIntosh amplifier clinics are free to the consumer, and everyone is invited to bring in their unit to be tested. Both amplifier test-clinics are geared primarily to give you the harmonic distortion produced by your unit from 20-20,000 Hz. at the manufacturer's rated full RMS power. Usually there is a long line of units to be tested, and most clinics have at least two technicians, one to plot the graph while the other performs the tests. Receivers, integrated-amplifiers, and preamplifiers are tested at the clinics but generally only the amplifier section of a unit is measured. High quality test equipment is used by both clinics to insure accurate results.

I decided to collect the results of the test-clinics from some of the dealers in the Boston area that had hosted a clinic. The test results I collected cover four separate clinics of which three were sponsored by McIntosh. The results include the years from 1969-72, and include over 237 amplifiers and receivers representing a total of thirty-four manufacturers. (I did not include preamplifiers in the results because all the units tested performed excellently in the categories I established.)

To organize the data I arbitrarily had to limit myself to ranking only those manufacturers that had at least four or more units tested. I divided the results of the HD into three categories: Category I - included units tested with less than one percent HD from 20-20,000 Hz. at the manufacturer's rated full RMS power. Category II - included those units with less than two percent, and Category III - included those units with greater than two percent HD.

Numbers were assigned to the categories in order to establish a ranking of the units. Six points, the highest possible, was given to the units that fell in Category I, four points to Category II and two points for Category III, the lowest possible score.

What do the results tell us? The results are a good indication of how a manufacturer will rate his amplifier's power output. As can be seen from the list, it is easy to identify those manufacturers that tend to rate their units conservatively, like McIntosh, or which manufacturers tend to overstate their units. The results indicate that there is a drastic need to adopt a uniform standard of rating amplifiers at least in their power handling ability.

The results may be some indication of reliability but to a smaller degree. Most of the units brought to the clinics by their owners were at least two years old. The results do tell us that the top five manufacturers were still holding their original specifications after several years. For example, one of the McIntosh units tested was fifteen-years old!

The results tell us also that an AR amplifier rated at fifty watt RMS/channel by its manufacturer is not the same as a Fisher rated by its manufacturer at the same RMS power. An AR fifty watt RMS/channel amplifier could conceivably turn into a Fisher seventy watt RMS/channel model by merely swapping advertising departments.

It is interesting to note that Fisher which is among the lowest in rank is also the world's largest manufacturer of high quality stereo equipment according to Avery Fisher, founder of Fisher Radio.

The top five manufacturers, or those manufacturers which tend to rate their product most conservatively in order are: McIntosh, Marantz, Heath, AR, and Sony. The lowest seven or those manufacturers which tend to 'stretch' their power output in order are: Scott, Dynaco, Lafayette, Eico, Realistic, Fisher, and Bogen.

If you buy a McIntosh amplifier your chances are probably one hundred percent that it will meet its manufacturer's specifications. And if your unit falls among the top five your chances are at least seventy-five percent that it will test in Category I. If you are the owner of a Bogen the chances of it meeting its manufacturer's stated full RMS power output from 20-20,000 Hz at less than one percent HD are probably nil. And if your unit falls in Category III, or the lowest seven ranked, the chances of it falling in the under one percent HD department are about 1.3 percent. Of course these figures are only applicable to the 237 units tested covering only thirty-four manufacturers. Generalizations to other units not included in these four specific clinics may not be applicable.

by,
Alvin M. Foster
Founder of the Boston Audio Society

|               | Rank | Ave. Points | Category I | Category II | Category III |
|---------------|------|-------------|------------|-------------|--------------|
| McIntosh      | 1    | 6.0         | 36         | 0           | 0            |
| Marantz       | 2    | 5.88        | 16         | 1           | 0            |
| Heath         | 3    | 5.71        | 6          | 1           | 0            |
| AR            | 4    | 5.52        | 13         | 4           | 0            |
| Sony          | 5    | 5.0         | 3          | 0           | 1            |
| Pioneer       | 6    | 4.33        | 2          | 3           | 1            |
| Sansui        | 7    | 4.26        | 6          | 5           | 4            |
| Sherwood      | 8    | 4.0         | 2          | 1           | 2            |
| Kenwood       | 9    | 3.78        | 8          | 1           | 10           |
| Harman-Kardon | 10   | 3.77        | 3          | 2           | 4            |
| Scott         | 11   | 2.57        | 1          | 4           | 16           |
| Dynaco        | 12   | 2.52        | 0          | 5           | 14           |
| Lafayette     | 13   | 2.5         | 0          | 2           | 6            |
| Eico          | 13   | 2.5         | 0          | 1           | 3            |
| Realistic     | 14   | 2.28        | 0          | 1           | 6            |
| Fisher        | 15   | 2.15        | 0          | 1           | 12           |
| Bogen         | 16   | 2.0         | 0          | 0           | 4            |

Below are those units not included in the results because of insufficient sample size. A minimum of four units were required.

| JBL                     | 6.0        | 2               | 0  | 0  |
|-------------------------|------------|-----------------|----|----|
| Southwest Tech Products | 4.66       | 1               | 2  | 0  |
| Aki [ <i>Akai?</i> ]    | 4.0        | 0               | 1  | 0  |
| Altec Lansing           | 3.0        | 0               | 1  | 1  |
| Panasonic               | 2.0        | 0               | 0  | 1  |
| Stromberg Carlson       | 2.0        | 0               | 0  | 1  |
| General Electric        | 2.0        | 0               | 0  | 1  |
| Concord                 | 2.0        | 0               | 0  | 1  |
| Crown                   | 6.0        | 2               | 0  | 0  |
| S.A.E.                  | 6.0        | 1               | 0  | 0  |
| Integral Systems        | 6.0        | 2               | 0  | 0  |
| CM Labs                 | 6.0        | 1               | 0  | 0  |
| Electro Voice           | 2.0        | 0               | 0  | 1  |
| Acoustech               | 2.0        | 0               | 0  | 2  |
| KLH                     | 2.0        | 0               | 0  | 1  |
| Symphonic               | 2.0        | 0               | 0  | 1  |
| Bell                    | 2.0        | 0               | 0  | 3  |
| Average                 | <u>:</u> : | <u>Totals</u> : |    |    |
|                         | 3.66       | 114             | 36 | 96 |