VALVE

VINTAGE AUDIO LISTENERS AND VALVE ENTHUSIASTS

in this issue -

Preamp audition

the Katlyn system

Vaic VV30, VV52 tube data

junk store LPs

upcoming meetings

August 6 ,1995 12 Noon
Show and Tell
at Electronic Tonalities, Poulsbo

August 20, 9am-1pm
Annual PSARA swap meet
Shoreline Museum parking lot
N.175th & Linden Ave, (one block west of Aurora ave.)

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VALVE

is the newsletter of

Vintage Audio Listeners and Valve Enthusiasts

dedicated to the preservation and dissemination of vintage audio knowledge.

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editor's thing

Sitting here writing this in a heat wave. Somehow those pretty fire bottles that keep the basement shop warm in the winter seem like a real liability this 90 degree day.

But if this isn't blues weather, I don't know what is. So I pull out Elmore, B.B. and Blind Lemon, and pretend I'm the third Blues brother.

Man, after listening to stuff like Living Stereos and Telarcs, this stuff is funky. Makes your system sound like one of those Rockola's (you know, that was really the guy's name)with the tail fins. I love it. This is listening that has nothing to do with the word 'audiophile'. Yes, the Muddy Waters redo has fabulous sonics (by the way, I found the CD and the vinyl very close in quality) but a reissued 1951 Elmore James has the same stuff a 20 year old Bordeaux has, that real warm, soft velvety kind of presentation, that gives you the intensified essence of the thing rather than the clarity of the original offering. Sort of an aural patina.

So dig out some of your funky stuff this summer and enjoy the way it creates a new sound out of your system. Your ears will enjoy the new surroundings.

Speaking of funky things, don't forget that the big Puget Sound Antique Radio Association swap meet is Sunday August 20th, from 9 to 1 at the Shoreline Museum (one block west of Aurora Ave. on 175th). There is always some great stuff to buy and lots of BS being shoveled! Bring some stuff to sell, we never see enough vintage gear out there. And wear your track shoes if you want to get to the good deals first, as Eric and Rick are pretty speedy!

Don't let the blue smoke out,

DAN

letters from fred

towards perfection, again

Dear Dan,

Sometimes when I hear about the placement of speakers in order to hear 'correctly', I begin to envision an electric chair from the State House that has been obtained at an auction and then positioned so accurately in one's living room that one's head is in the ideal location relative to the speakers to hear the perfect sound!

Now consider the source of the sound. The symphonic conductor adjusts the orchestra, the level of the individual players, their location, the rendition of the selection, as he sees it and wants to hear it. Then the sound is sent to the audience either by direct path or by reflection from parts of the stage, the shell, or the other structural parts, in a slightly different order than that which the conductor hears, and modified by the reflectivity and absorbency of the elements in the path. Each seat in the theatre, each person, has a different coefficient of absorbency and reflectivity. Walls and overhead all modify the sound. If an amplifier is used, it can modify the sound and in a very selective manner. Thus the human factor enters into the enjoyment of a selection, with many variables. Thus the perfect sound system at home can duplicate only one of many variables. The individual also enjoys certain things and sounds and balances, thus the individual is one of the many variables.

Now you design and build what is to you a perfect system. You fool around until it is more than perfect. Then after several months, sometimes weeks or even days, you think that you should change a capacitor, change a resistor, move pairs of tubes around, and lo! the amplifier is now turned upside down, where it stays for months. Each listening period leads to 'one more slight change'.

Now why not try a radical idea. After 3 to 6 months, take the amplifier and return it to the original values. Sounds pretty good doesn't it! Not only back to the original values but turn it over again so the wife will be happy. Now after a few weeks, it turns over by itself, parts get change and the same cycle repeats.

My theory, if it sounds good to you, enjoy it.

long live the filament

As more and more people turn to high power triodes for systems, we can expect any day now to see the ultimate system for single ended quality, a water cooled triode in use!

There is a point all users of old transmitting tubes should be aware of.

Filaments generally are the control as to the life of the tube. For smaller tubes we get used to measuring the filament voltage. However for higher power tubes the high level stages were designed with a current transformer in the filamnet circuit and the voltage adjusted to set the filament current at the design point.

All users of tube type high power broadcast transmitters were more than aware of the cost of the output and modulator tubes. In those days of yore, $1000 per tube was a lot of money, as was the lost revenue of the station if they went off the air to replace a tube.

Tube manufacturers had recommended values of reduced filament voltage or current to extend tube life.

In general the reduction of 5% would still see the tube perform as required, in a carefully designed transmitter. Life would be greatly extended.

In these days when even old 2A3 tubes are quite expensive, it would pay for all to first have your filament voltmeters calibrated, then measure <u>at the socket</u> the actual filament voltage, and then reduce it slightly.

say vaysh

Paul wrote to the owners of Electra-Print Audio this month for information on the Vaic VV30B. This is the reply he received:

Dear tube nut:

Your (sic) close on your introduction. We were taken off the shelf and dusted, then asked "you guys can design tube gear, right?" So here we are-

Thanks for your interest in the new VV30B - First, I must ask you what you mean by the "other" (non VV30B).

The factory has indicated it will publish curves to full parameters - the one enclosed is to 450V - you can put 525V on the plate and bias it at 130mA and it will perform beautifully - the more you dissapate on the plate (power) the better the THD (2nd). Our circuit (enclosed) will duplicate the 2nd, out of phase, and cancel in the VV30B. The results are amazing. We have already built equipment and are selling them. Please write or phone whenever -

Regards,

Jack *(last name cut off my copy)*

Along with the letter came eight pages of data regarding the VV30B, the transformers Electra-Print custom winds for them and thre above mentioned circuit diagram. Here's some of the highlights:

VV30B type 1

filament rating	5.0 - 5.5 VDC
	or AC C.T.
	1.2 - 1.3 amperes
max ratings	
plate voltage	550 volts
plate current	160 ma
plate dissipation	65 watts
characteristics	
mu	3.85
plate resistance	700 ohms
load resistance	2000 to 4500 ohms
single ended class A conditions	
plate voltage	450 to 525 V
plate current	138 to 160 ma
grid bias	-82 to -125 volts
power output	7 watts
THD	.05%

The curves are this month's sexy centerfold, and you can scope the circuit and other info at the next meeting.

Two days later I received the poop on the big whopper VV52B from Jim Dowdy:

VV52B

filament rating	6.0-6.4 V DC or AC
	2.0-2.4 A
max ratings	
plate voltage	650V
plate current	200ma
plate dissipation	85watts
characteristics	
mu	4
plate resistance	600 ohms
load resistance	1500-3500 ohms
	rated 250-500 ma
output power	18-28W

These sage words are included with the data sheet:

" New valve leave filament 10 min without musical signal, after 3-5W for canal minimal 2 hours, for best accomodation in your amplifier.

Make on amplifier only without musical input signal !

Bad filament make short live !"

Words to make live by...

august

This month I'd like to see everybody bring something for show and tell. As we grow I tend to lose track of what everyone is up to, and I'd like to catch up with youse guys.

So bring your latest project, finished or not (mine never are), your latest vintage LP or hot new CD, the recording you made last month, or that amp you got six months ago and still haven't listened to.

I'll have two systems, barring disaster, for evaluation purposes, and plenty of coffee.

congrats

Congratulations to members Steve and Gwen, who are slated to marry August 27. Steve will be storing most of his awesome gear while they begin planning a house purchase in the next year or so. Steve called me with a bit of melancholy in his voice to announce that he had listened to the mighty MI 200s and Hartsfields for the last time before packing them up. You have our best wishes for your new life together and our most sincere sympathy for the temporary loss of your awesome system.

September

Hey, I need some ideas for September's meeting. Which of you guys is willing to show off his home system? We need to get away from the old basement here and see what's going on in somebody else's house. Please let me know soon, like the upcoming meeting. I know, I know, you're just not quite ready to show your stuff. Hey, you're never gonna be ready! We want to see it anyway. Remember, I bring the coffee and donuts, so all you have to do is make a trail to the listening room and wake up by 10 am.

both ways becomes the super whamodyne

As the speaks I've been anguishing over since April are due to enter the big efficient speaker contest, I'll fill you in on developments without spilling any of the incredible state of the art breakthroughs employed in its overwhelmingly superior performance (hey, all the other speaker builders talk like this!).

Firstly, they are three ways. Five drivers on each side. No crossovers (Huh?)

Symetrically loaded bandpass woofer. Impedance (8 ohms nominal) only varies from 3.5 ohms to 10.14 ohms from 10Hz to 20 kHz, so no wacky loads are seen by the amp.

Cabinets are now MDF. The super neat carbon foam/cork boxes talked a little too much and eventually got buzzy during loud passages. I think the foil was delaminating from the foam.The woofers reside in their own enclosures, upon which the other drivers perch in their towers.

I am pretty unconvinced that you can specify the efficiency of a loudspeaker system after this experiment, but I'll say about 100 dB might be believable. The 4 watt 6080 amp is very dynamic, and 15 watts really blasts.

The woofer is getting down to 40 Hz no sweat at this efficiency level.

I felt that I had run up against the shortcomings of my workshop listening room in evaluating further changes. Luckily the guys at Nut About HiFi generously offered a listening session in their fabulous high end listening room. We used a Krell KPS-20i CD player/preamp ($10,000 list ?) an Audio Note Ongaku integrated amp ($90,000 list) and Straightwire interconnects. A/B'd against Wilson X-1's and Krell KAS's, I wasn't completely embarassed. A bit shy in upper bass, but I liked the highs a bit better than the X-1's. No kidding!

Working on that bass...

the Katlyn - our new sound system

Tuesday morning, July 25th we received, for long term development and evaluation, the new Katlyn sound system.

We were quite surprised to find the system in fully operable condition as delivered, in fact the system was playing rather loudly as it was unpacked.

My initial impressions were of an attractively packaged product, seemingly rather efficient, with little bass, but quite accurate reproduction of the (small) human voice. The only odd thing about the presentation was a slight growling sound during quiet passages

After the usual cleaning and polishing, we weighed the system in. I must say that the amount of sonic output available is quite impressive considering the unit's 9lb. 4oz. weight, and single speaker (there is actually a second sound source, a sort of port, but this seems to come into play only occasionally, and quite frankly the output from this port is rather repugnant).

A few days with the new system have allowed us to measure SPL at 1 meter of 80 dB average, with 84 dB peaks.

When one receives a new product for evaluation, it is always prudent to check with the supplier for special instructions. This unit was typical in its need for some special handling.

We were told the unit should be kept tightly wrapped for the first month or so, and should be stored lying on its side. One other odd requirement is the frequent changing of a pad designed to absorb the output from the secondary port. We must concur with the supplier that frequent changing of this absorber greatly reduces noise, dramatically enhancing the performance during quiet passages.

We found the performance of the Katlyn quite impressive and look forward to a long term audition.

junk store trophies

Here's a few LP's I picked up in the thrifts this year that floated to the top of my pile:

RCA Living Stereo LSC-2616
Verdi Aida Highlights
1962, Leontyne Price, Solti conducting.

Really neat voices with tons of power. The grooves are really wiggly on this one. Very cool movement of singers around the stage in a really great performance. You'll like this even if you think operas suck.

Mercury Living Presence SR 90411
Baroque Masterpieces for the Harpsichord. Rafael Puyana

I admit to being one of those who considers more than five minutes of the usual Nonesuch or Turnabout harpsichord recordings as torture. But this recording reminds me of sitting in the living room of my homeboy Bryan's old girlfriend Tammy, while she played the harpsichord. She also was the star swimmer on the varsity men's team, one heluva good cellist, and played french horn too, but I digress. This recording gets the bass notes right. I bet most people think a harpsichord is a tinky, plunky little thing. Find this album and hear what one really sounds like.

Turnabout Vox TV-S 34452
Music for Glass Harmonica
Bruno Hoffman

This album is so weird it's cool. Imagine a picture of a musical instrument composed of a bunch of wine glasses filled with water, sitting in a box, and a guy in tails rubbing the glasses. Yup, the picture is on the back cover to prove it. This album is totally different/etherial/bizzare. Find a copy.

what's brewin'?

Eric called me sounding very enthusiastic about a Heathkit W-3 he did a major restoration on. He attributes its great sound to the Acrosound output transformer. This W-3 was put together from a totally trashed amp chassis we found when we cleared out that house last year. It was so bad we didn't even recognize it for what it was. Eric found a power supply chassis and totally dismantled both chassis, repainting transformers, replacing broken sockets and removing rust. He replaced all caps and resistors, and tubed it with Tung-Sol 5881's. He says it may sound better than a W-5. Hear that Rick? I smell a challenge!

Jim is constructing a push pull parallel 2A3 amp to run his Peavey woofers. He says he may use nuvistors for the front end. Don't you worry, I already have a request in for a schematic.

Dave and Paul came away from the last meeting with my prized LE175's. I'm sure they will put them to good use before I would. Each is planning a killer mono system, and Dave and I are laying plans for his woofer enclosure.

Paul has been working on a mod to the Optimus 990's. He trashed the original tweet, and is planning on using the Eminence driver instead. We'll get to hear a modded one vs. a stock one soon.

Rick has been inventing cool new power supply tricks again. This time he has a regulator that ramps up slowly to V_{reg} at startup. I'm sure he'll enlighten us when finished.

Eric drove by Rick's last week and found him replacing his roof. Jeez, Rick, no more than 20 watts through those A7's, OK?

What am I doing? Well, between writing this, falling behind on my restoration work, being a weekend pastry chef, preparing for a new baby, and interviewing for yet another job, I have started the final (yeah, right) version of my efficient speakers for the big contest. I have also received my Newform ribbon drivers, which will stand in for the Maggie tweets when I get to it. They are cool.

any requests?

We've had requests for the following articles:

a Reel to Reel primer

A comparative description of the various Heathkit amplifiers.

Dream mono systems

Sonic differences of various rectifier tubes.

Mesh plate directly heated triodes

Sharpen your PC's and dig into one of these topics. Tubular minds want to know!

cravings

Paul Wesseling needs service data for Knight Y777 amp. It's 30 wpc, uses EL37's, circa 1958. 40 Ainslie St. N., Canbridge, Ontario, Canada N1R3J5

Ed Coleman needs a Dyna MkII manual, and would like to see club members put together a quality chassis wire purchase. 206-678-3452

Jim Dowdy is looking for the following:

WE 437-A sockets (a larger than normal nine pin type);A copy of the Loftin White amplifier article published in a 1929 issue of Radio News;WE 262-B;4 volt filament transformers

Jim has several long wish lists, and is open to trades. 404-451-5684

Steve Schneider is looking for cabinets for a Scott LK-72 and a Fisher 800-C. 206-325-0864

too cool to live without

Jim Dowdy has a pair of NOS globe style 10's and Tango FE-20-14S output transformers for $400. 404-451-5684

Tony Glynn of the Lowther Club of America is offering special VALVE member prices on their line of full range drivers. 503-370-9115

1)Pair Newcomb 60W amps. In cool 40's style cabinets. 4-6L6GB in PPP, 6J5 drivers, dual 5V4 rectifiers, 6V6 regulator. New coupling caps. Sound nice with my Maggies $150. 2)Eico HF-85 preamp. New coupling caps $50. 3) Phase Linear 6000 Audio Delay. Home theater! Nice shape $60. Pair Dynaudio D-28 AF, pair JBL LE-5 (for Edgarhorns), pair Realistic JVC ribbon copies. Dan 360-697-1936

july

July's meeting ended up in the living room. For those of you who can't make it to the meetings, the Magnepans now reside there. The current amps are Newcomb 60W PA amps. Nice and punchy.

TT is a Thorens TD160 with a Grado MC+ cartridge. For the meeting Stan brought a Technics CD player. The Apt Holman was taken out of the chain and the following preamps were auditioned:

Rick's Fisher 400-C

Rick's Lafayette KT-600

Eric's Eico ST84

Eric's Heathkit SP-2

Dan's Eico HF 85

Dan's Scott 121C

Dave's Fisher 50C

Jerry's Scott LC-21

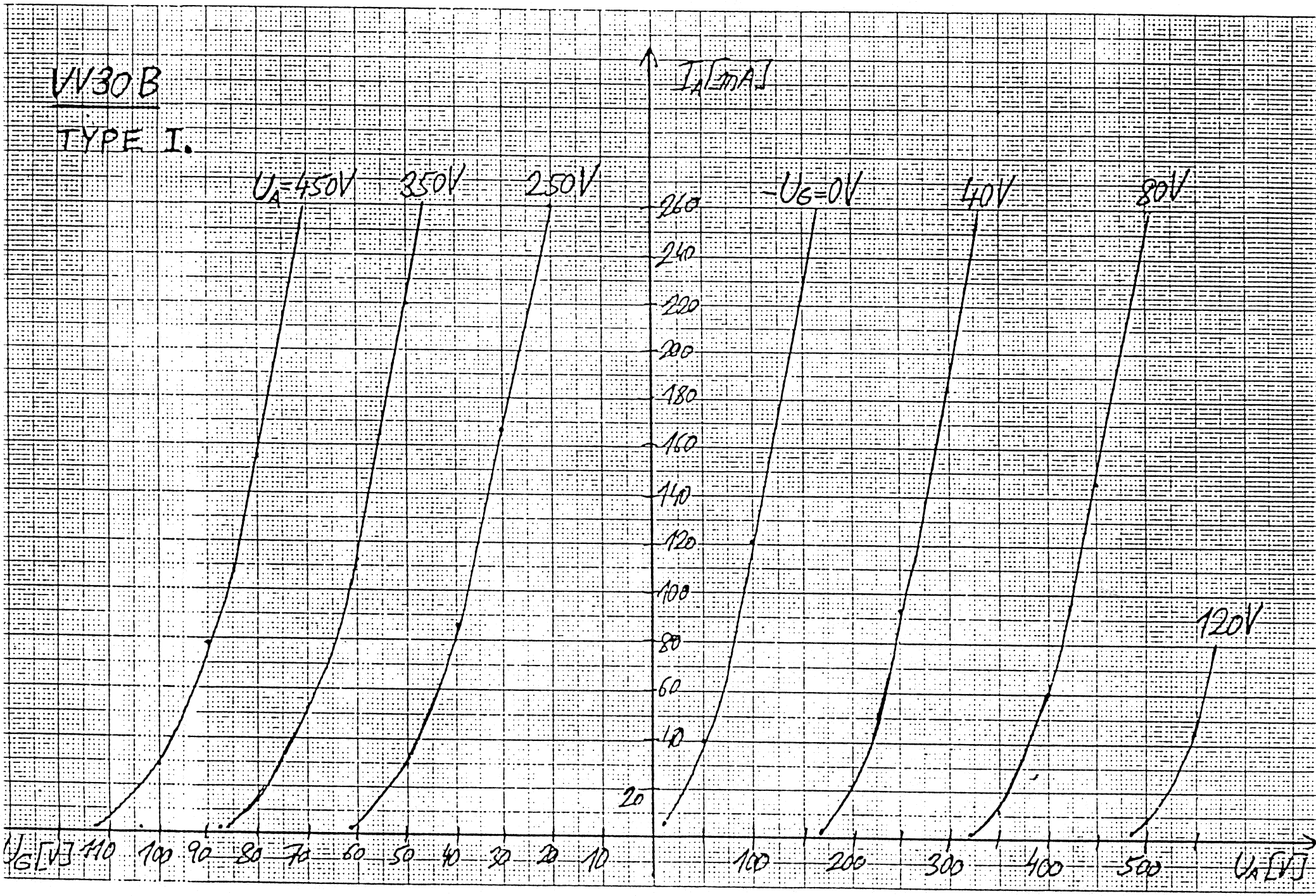
Now this was not the ultimate vintage preamp shootout by a long shot, no Mac C-20's, or Marantz 7's, or even a PAS.

But it was nonetheless enlightening. My favorites were the Fisher 400-C and the Heathkit, of all things. I wonder if Rick will try the Fisher in his cool system we heard earlier this year. I bet it would be nicer than the Lafeyette, which sounded very nice in its own right.

Eric tells me that Steve at Angela Instruments has given the favorable nod to the Heathkit before, and now I understand why. Quite a nice sounding unit. I guess it supports the theory that to sound really good it has to look butt ugly.

The biggest disappointment was the HF 85. I had heard people say these were great preamps, and got one to try. I recapped it with polystyrene caps and tubed with 5751's, but it sounded pretty rolled off. At least until I adjusted the rather primitive treble control, whereupon it sounded presentable, although not as clean as the newer ST84.

All in all a fun afternoon.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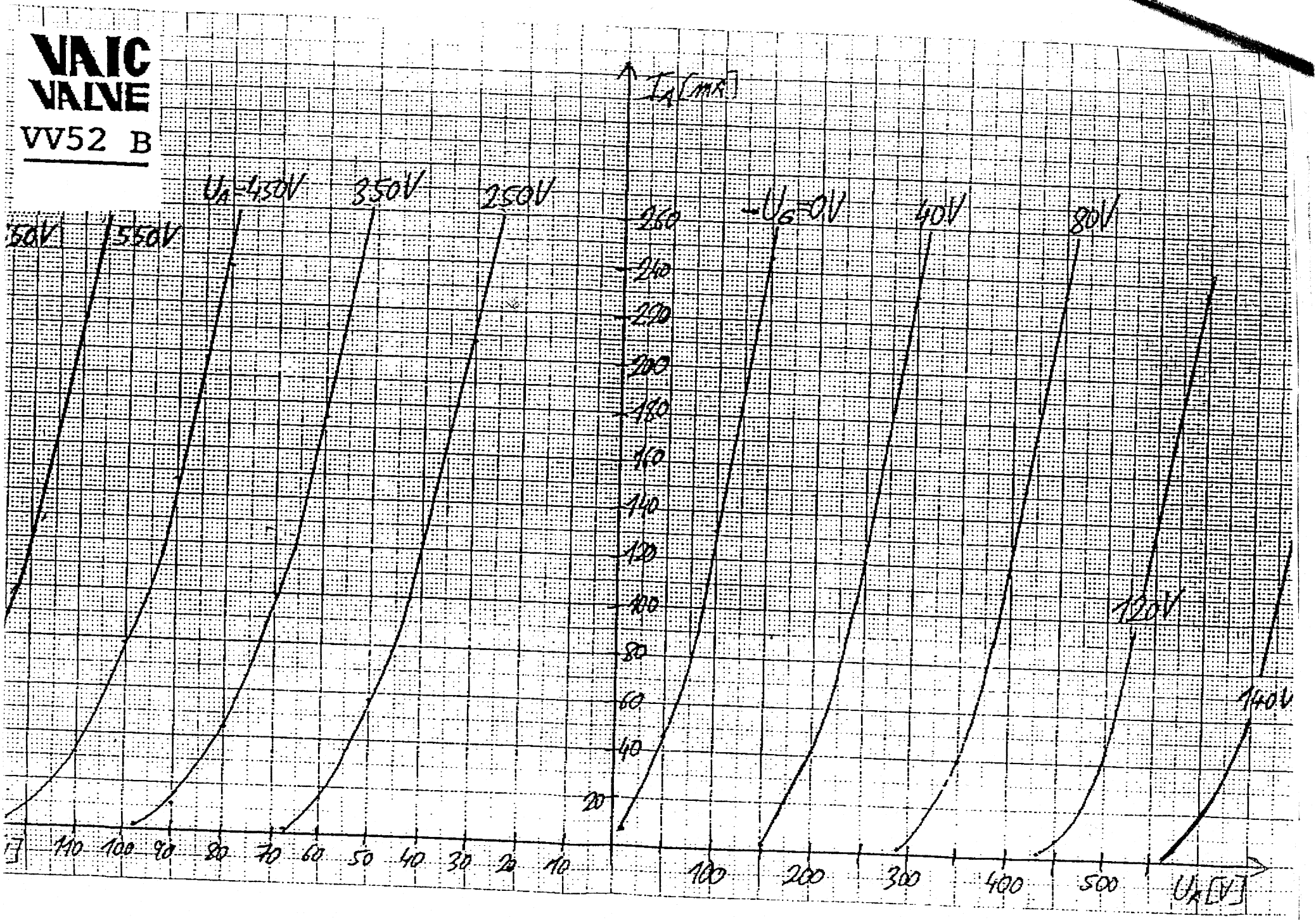
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VV52B - TECNICAL DATA

HIGH LINEAR LOW FREQUENCY TRIODE 85W.
Uf=6,0-6,4V AC or DC If=2,0-2,4A

Ua max=650V Ik max=200mA Pa max=85W

S=min 6,0mA/V Ri=max 600 μ=4
Ia=160mA for Ua=450V for Ug=/-80...-100/V
Ig=max 1μA for 65W max 4μA for 85W

FOR OUTPUT TRASFORMER 250-500 mA
Load resistance 1500-3500Ω
LINEAR POWER OUTPUT 18-28 W

HIGH POWER TUBE only for class A amplifier

IMPORTANT INSTRUCTION FOR USE :

New valve leave filament 10 min without musical signal,after 3-5 W for canal minimal 2 hours,for best accomodation in your amplifier.
Make on amplifier only without musical input signal !
Bad filament make short live !

MECANICAL INSTRUCTION :

Leave min.5 cm vacant cold space around glass bulb valve for thermic dissipation.
For power about 80W is reccomanded ventilator.
Glass bulb must be temperature under 200 C !

RECOMMENDED DRIVER :

VV5B or VV30B