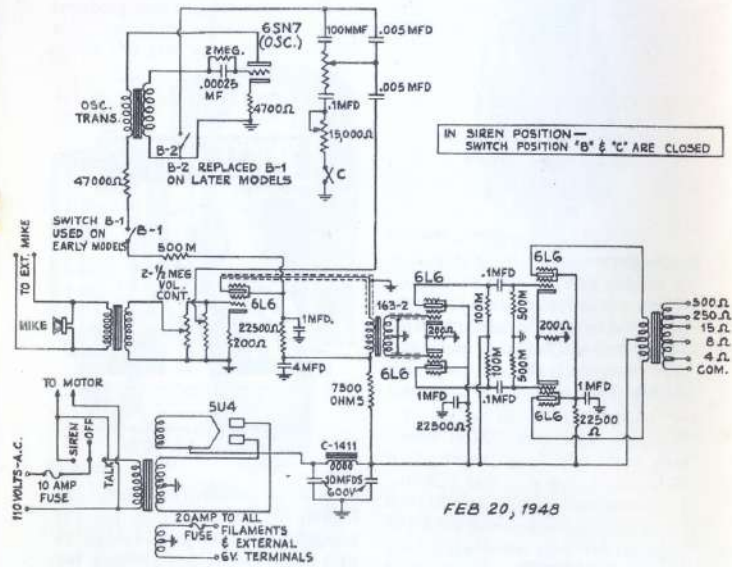


TUBE COLLECTOR

TUBE COLLECTORS ASSOCIATION
"HISTORY • PRESERVATION • APPLICATION"

Vol. 11 No. 2

April, 2009



TUBE COLLECTOR
TUBE COLLECTORS ASSOCIATION, INC.
 PO Box 636, Ashland, OR 97520, USA



The Tube Collectors Association is a nonprofit, noncommercial group of individuals active in the history, preservation, and use of electron-tube technology. *Tube Collector*, its bulletin, appears six times per year.

Officers and Staff

President: Ludwell Sibley, KB2EVN, (541-855-5207), tubelore@jeffnet.org

Vice President: Norm Wilson, N6JV, (916) 689-3534, N6JV@N6JV.com

Secretary-Treasurer: Bob Deuel, K2GLO, (541) 482-8752, K2glo@jka-systems.com

Editor: Ludwell Sibley, as above

Webmaster: Norm Wilson, as above

Awards Administrator: David Kraeuter

Directors:

Mike Bach, WB6FFC

Jerry Vanicek

Jim Cross (chairman)

Norm Wilson, N6JV

Ron Lawrence, W4RON

Honorary Members: Bob Deuel, K2GLO; Bro. Patrick Dowd, W2GK; Al Jones, W1ITX; Ludwell Sibley, KB2EVN

Web Site: www.tubecollectors.org

email Reflector: tubecollectorsassociation@yahoogroups.com

To subscribe: send a blank, untitled email to

tubecollectorsassociation-subscribe@yahoogroups.com

To unsubscribe: send a blank, untitled email to

tubecollectorsassociation-unsubscribe@yahoogroups.com

Group moderator: Ron Lawrence, W4RON, w4ron@carolina.rr.com

To join TCA: annual dues is \$20.00 (in North America; \$25.00 elsewhere), to the address above. Please make checks payable to "Tube Collectors Association." Payment by PayPal is welcomed, to tca@jkasystems.com. The membership year runs January-through-December. Those joining after February receive the year's back issues of *Tube Collector*. Multi-year memberships are offered: in North America, \$38 for two years or \$56 for three; elsewhere, \$49 for two years or \$73 for three.

Articles on tube topics are invited. Editorial correspondence should go to the editor at tubelore@jeffnet.org or 102 McDonough Rd., Gold Hill, OR 97525.

Renewals, changes of address, and other membership business should go to Bob Deuel at tca@jkasystems.com or PO Box 636, Ashland, OR 97520.

Unless copyrighted by an author, this material is available for attributed reproduction.

FRONT COVER: Tube-and-bulb collector Floyd Lyons pays a visit to John Stokes, his New Zealand counterpart, in 1967. Lyons is admiring a Spherical Audion, while Stokes is holding a Loewe OE333 home receiver with its triple-triode tube.

Photo: Auckland Star

REAR COVER: The iconic 6L6 tube is certainly familiar in tubic circles as an output tube, as a driver . . . but as a *microphone preamplifier*? This is the "Electric Fire Alarm" from the American Communications Corporation of New York City.

Rider Public Address Manual, 1948

MICROPHONICS FROM THE EDITOR



2009 MEMBER MEETING

We'll meet this year at 1 PM on Thursday, July 9, at the Causeway Bay Inn (formerly Holiday Inn), Lansing, MI. The Michigan Antique Radio Club is welcoming us to their "Extravaganza" event as they did then; in particular, they are invited to attend our meeting and TCA members are offered the MARC member rate for registration. Our format will be like that of the 2007 meeting at the same location, with a brief business meeting, presentations, some show n' tell, etc. The enclosed "Extravaganza" brochure gives details on special room rates, a registration form, etc.

The flea market at this event is cleverly designed: for those who want a "risk-free" environment as to weather, spaces under a massive tent are quite affordable, with table and chair included. While this is nominally a "radio" event, sharp-eyed tube enthusiasts took away some thermionic goodies in 2007.

(The flea market has another novel characteristic: unlike another major event where vendors' fees have traditionally gone to hire security guards to keep non-member buyers out, MARC posts a large sign next to the space saying "Public Welcome!")

The equipment contest has an "open" category, so this is a good opportunity to build "tube consciousness" by entering suitable displays.

MORE ON THE TCA DATA CACHE

The new DVD-ROM, the TCA Data Cache, is gaining acceptance among serious tube researchers. Besides sales to individuals, we have furnished complimen-

tary copies to half a dozen museum libraries, in hope that it will be available for visitors' use as well as archival preservation.

As mentioned in the last issue of *TC*, it has three parts:

: (A) PDF scans of about 7000 pages of RCA internal product-management files on about 2800 tube types, mostly entertainment and receiving special-purpose types but with some transmitting, etc., tubes included; (B) about 7000 "registration release" records from the Electronic Industries Association, from 1947 until "modern" times; and (C) 43-photos from Eitel-McCullough Inc. showing step-by-step the 1944 production of the VT-158 "Zahl" radar-oscillator tube.

None of this material was "public." The RCA records were obviously sensitive proprietary stuff in their time. They occasionally contain frank material of an unflattering sort, like the project to produce the 5524 thyratron - delayed, delayed again, and finally abandoned. The EIA releases were on a members-only basis. Full EIA membership ran about \$10,000 a year in the '60s, so getting the releases - and surveilling the competition - was a cost of doing business. Most of the data

IN THIS ISSUE

Glassblowing for Long-Distance Telephony	
Franz Pichler.....	3
Importadora Electrónica	
Abel Santoro.....	12
A Survey of Tube Popularity in Oldie Radios	
Ludwell Sibley.....	15
More on NRTC Tubes	
Photos from Jim Cross.....	20
New DVD: CV Valves	21
Commemorating Floyd Lyons	22
Can Radio Tubes Be Sold Abroad?	
S. E. Laszlo.....	23
End of the 18	26
Recent eBay Results	27

"IMPORTADORA ELECTRÓNICA"
AN ARGENTINE COMPANY WITH MORE THAN FIFTY
YEARS BUYING AND SELLING ELECTRON TUBES

Abel Santoro

After the end of WW II, two friends, Mr. Roberto Villani and Mr. Benigno Novoa, began to buy and sell electron tubes in Buenos Aires. In 1958 the two founded the company Importadora Electrónica S. R. L., located in its own building at 949 Salta St., Buenos Aires town, near the Plaza de Mayo.

As its capital increased, the firm became a stock company, changing its name to Importadora Electrónica S. A. C. I.

To increase the range of suppliers, the proprietors began to make personal contact with people of foreign countries specializing in the marketing of electron tubes.

The company imported and distributed, at wholesale and retail, all types of electron tubes, camera tubes, vidicons, orthicons, plumbicons, and all sorts of cathode-ray tubes. The market comprised government agencies, radio and television broadcasters, radio amateurs, industrial companies for wood and metal processing, welding, instrument factories, etc.

With time, this company bought up the stocks of almost all the others in the field, such as Siam Di Tella (Westinghouse); Standard Electric Argentina; Graham & Co. (Mullard); RCA of Brazil, Chile, and Mexico; General Electric Uruguay; Amperex; etc.. As a result this company developed the main stock and became the main supplier of electron tubes in Argentina as well as all South America, Europe, Asia and Africa, introducing very good quality of all types of electron tubes, selling with full warranty.

At that time, tubes made in the USSR were not readily accepted in the market. An opportunity arose when a shipment of Soviet receiving tubes was left in an Argentine port, and another tube lot was left on the docks of a Russian port because the customer at that time had not paid for the abandoned shipment of merchandise.

For this, Mr. Ocará of the Soviet embassy and Mr. Novoa of Importadora Electrónica talked together with the manager of the Lloyds Bank and finally the shipment was imported into Argentina. Figures 1A and 1B show two cartons from tubes imported from Russia.

With the Soviet tubes on sale, the customers began to see that the quality of these tubes was not bad - on the contrary, very good - for which the tubes were accepted in a short time.



Fig. 1A. Sovtek red-blue-black carton, showing all four sides.

The proprietors are proud to say that this was the first company in our country allowed to buy with 180 days' credit from Sylvania in the USA, after Mr. Hal Hoge saw how it controlled the terms of payment from the customers.



Fig. 1B. Electro-Harmonix carton, including end flaps.

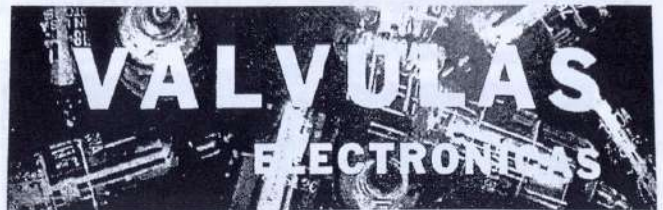
The common claim is "If Importadora Electrónica does not have the tube in stock, this type does not exist."

Another important matter is that the company is recommended by its competitors when some type of tube is out of stock in their shops.

Importadora Electrónica performs rebuilding of tubes, at 60% the price of a new tube, with full warranty.

In an advertisement that appeared in September 1964, one can see some types of tubes imported by the company (Figure 2).

Today, after more of fifty years, Mr. Villani (at left in Figure 3) and Mr. Novoa (at the right), with Importadora Electrónica, con-



DE TODO TIPO Y POTENCIA (Hasta 250.000 watts.)

RECEPCION
 TRANSMISION
 TELEVISION
 AMPLIFICACION
 INDUSTRIA
 USOS ESPECIALES

COMPACTRONES
 NUUVISTORES
 STROBOTRONES
 IGNITRONES
 TIRATRONES
 FOTOELECTRICAS
 RAYOS CATODICOS
 MAGNETRONES
 OJOS MAGICOS
 DECATRONES

- CUANDO NECESITE VALVULAS DE REPOSICION
- CUANDO PREPARE NUEVOS DISEÑOS
- PARA HACER SUS PRESUPUESTOS

CONSULTENOS
 SEMANALMENTE RECIBIMOS NUEVOS TIPOS DE VALVULAS

Importadora Electrónica S.R.L.

BALTA 049. CAPITAL FEDERAL

TELEFONOS: 27 - 0011 y 87 - 0012

Fig. 2. Importadora advertisement: "Electron tubes of every type and power, up to 250,000 watts." "When replacement tubes are needed / when you prepare new designs / to make your budget." "We receive new tube types weekly." On offer are Compactrons, Nuuvistors, strobotrons, ignitrons, thyratrons, phototubes, CRTs, magnetrons, magic eyes, and decatrons.

tinue buying and selling electron tubes and also such electronic components as transistors and integrated circuits, and hard-to-get items.

Acknowledgements: To Mr. Benigno Novoa and Mr. Roberto Villani. To Editorial Arbó, Buenos Aires.



Fig. 3. Messrs. Villani and Novoa with an interesting industrial-heating tube.

A SURVEY OF TUBE POPULARITY IN OLDIE RADIOS

Ludwell Sibley

We reported last February on the radio-identification aid offered on John Okolowicz' Web site, www.grillecloth.com. The basic intent of the search system is to come up with a possible make and model for a chassis, given one to four of its tubes. However, one can also use it to discover—subject to some caveats—the relative popularity of a particular tube. All that's necessary is to type in the identifier of the tube in question, without specifying the total number of tubes in the hypothetical radio. The system then reports the total number of "hits" and lists the model[s].

The list below is the result of multiple searches. It gives some rather surprising results, particularly on the odder/scarcer types.

The cautionary note is that the system, being the fusion of two overlapping data bases, will undercount or overcount in many cases. It deals with U. S. home, car, and portable radios up to the 1942 wartime end of production, as listed in the 1944 Sylvania "tube complements" book. In parallel, it handles home-only sets of late-'20s to mid-1951 vintage, as extracted from the Rider servicing manuals. Therefore, for a given tube [12SA7, say], it may double-count the prewar models that used this type. It will undercount postwar home sets of more than eight tubes and won't capture appearances

of tubes in postwar portable or auto receivers. However, for tube types that were abandoned before postwar production, the models will be counted fairly accurately. [We must remember that the Sylvania and Rider publications record a huge number of models, but certainly not all that existed.]

That said: since the "onezies-twozies" tube types are of greatest interest, any type that turned up 25 times or fewer has been checked against the Rider manuals for double-counting, and has had the number of appearances corrected. These cases are flagged with an asterisk in the listings. Also, in a few cases where no "hit" came back [i. e., no appearance of the tube in Rider's], a successful check has been made against the monthly "new circuit" column in '40s issues of *Service* magazine or other sources. We have also guarded against false results based on the occasional scanning error, which appears here and there in the data base.

The "onezies-twozies" types must've been a real curse to radio service shops. Stocking-up with spare tubes was a necessity for good customer service, but a great many types were non-sellers. It's surprising how many of these orphans (6A4s, 12E5s, etc.) are still around, unsold after 60-plus years.

In the tabulation below, the [bracketed] numbers refer to notes at the bottom.

VACUUM	5Y4	192	25Z5	2194	81	88	KR1	4 [14]*	
RECTIFIERS	5Z3	360	25Z6	949	82V	0	BR	10 [15]*	
1-v/1V	104	5Z4	381	35W4	489	83V	35	KR1	2 [16]*
1V2	0	6X4	22*	35Y4	140	84/6Z4	691	MERCURY	
1X2	0	6X5	429	35Z3	72	117Z3	31 [9]	RECTIFIERS	
2Z2	0	6Z3	2 [2]*	35Z4	111	117Z4	2 [10]*	6Y5S	7 [17]*
5A24	13*	6Z5	4 [3]*	35Z5	1843	117Z6	.53 [11]*	82	111
5T4	11 [1]*	7Y4	.56	45Z3	0	879	5 [12]*	83	68
5U4	90	7Z4	17*	45Z5/40Z5	14*	G84	2 [13]*	OUTPUT	
5V4	30	12X4	0	50X6	9 [6]*	GAS		TRIODES	
5W4	350	12Z3	163	50Y6	19 [7]*	RECTIFIERS	10	37	
5X3	0	25W4	0	50Y7	3 [8]*	0Y4	0	45	768
5X4	36	25Y5	1 [4]*	50Z7	11*	0Z4	113	45A	0
5Y3	1671	25Z3	1 [5]*	80	5460	BA	See below	46	74

**We Repair
The Following
Radio Tubes**

And Guarantee Them

WD-11	UV-169	\$3.50	\$3.80
WD-12	C-299	3.50	3.50
UV-200	UV-301A	2.75	5.50
UV-201	C-301A	3.50	3.50
C-300	UV-202	2.75	4.00
C-301	C-302	3.00	4.00
DV-5	DV-6A	3.00	3.00

Mail Orders solicited and promptly attended to
Special Discount

Dealers and Agents, write for
Special Discount

H. & H. RADIO CO.
P. O. BOX 22-R
Clinton Hill Sta. Newark, N. J.

Radio Tubes Repaired

We will repair your old tubes for you at following prices:

W-11, WD-12	\$3.25
C-11, C-12	3.25
UV-200, C-300	2.75
UV-201, C-301	3.00
UV-201-A, C-301-A	3.25
UV-199, C-299	3.25

Tubes guaranteed same as new.
Tubes returned same day C. O. D.

DEY'S RADIO SERVICE
Dept. F, 235 Pine Ave., Chicago, Ill.