



WEST VALLEY AMATEUR RADIO CLUB, INC.

P.O. BOX 1573, SUN CITY, AZ. 85372

SHORT SKIP

SHORT SKIP is a periodical published monthly (every 2 months in summer) by WVARC. Deadline for items is 2nd Saturday of the month. Mail to PO BOX or call Editor Tom Peterson (days) 602-233-3068 - (evenings) 623-872-3013.

VOLUME XXVII NO 3

MARCH 2000

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Short Skip Editor Tom Peterson KK7KW: lasergraphic@earthlink.net

CLUB CALENDAR

SATURDAY	MARCH 4	LICENSE EXAMS, De VRY INSTITUTE, PHX, 8 TO 10 AM
MONDAY	MARCH 6	MEETING, ST CLEMENT SOCIAL HALL, SC, 7 PM
SATURDAY	MARCH 11	CLUB BREAKFAST, TIVOLI GARDENS, SC, 8 AM
SATURDAY	MARCH 11	SPRINGFEST, SCOTTSDALE COMMUNITY COLLEGE, 6 AM
WEDNESDAYS		2m HAM NEWSLINE NET, 147.30 MHz, 6:45pm
THURSDAYS		BRUNCH, LINDA L'S, SUN VILLAGE (Surprise), 9:30am
DAILY		CALL-IN NET, 147.30 MHz, 9am

MEMBERSHIP IN WEST VALLEY ARC is open to anyone with an interest in Amateur Radio. One \$10 annual fee includes all family hams at same address; only one Short Skip mailed to each address.

PROGRAM FOR MARCH 6 MEETING:

The March meeting will be presented by Randy Starace, KK7TV.... The program will be about his company, Custom Audio. Randy will talk about his amateur repair business, how he got started, and his ham gear of which he has many collectors items.

NEW CLUB WEB PAGE ADDRESS

The WVARC has a new web page address that is noted below. If you have web accessibility, log on to our web page for the most up to date information on the WVARC. Chuck, W7KIV does an excellent job of keeping the web page organized and up to date.

<http://home.az.rmci.net/chuckh>

CLUB NOTES

FCC License Expirations: N7ADB - Bob Lisk - April 2000
W6SQ - Ken Morrison - May 2000
N7OWP Ken Wakershauser - May 2000

CONGRATULATIONS TO:

Fred Jones, KC5AC upgraded to Extra class.
Tom McGuire, WA6ULD upgraded to General class.

HAM RADIO LICENSE EXAMS at DeVRY March 4th. Register 8 to 10am; no tests will start after 10. Bring photo ID, original and copy of appropriate licenses or CSCEs. Form NCVEC 605 is available at Registration. Fee is \$6.65; please have correct change. For this fee you are entitled to one test in all desired Elements; a second charge is made for a repeat test in any Element. No charge for Elements 1A, 2.

The VE Team will not accept FCC Forms 610 and 605. Applicants will be given Form NCVEC 605 to fill out at the sessions. Applicant's social security number or FCC license identification number must be supplied. After April 15, Element 1A, the 5 wpm code test will be replaced by Element 1, also a 5wpm code test. The difference is Element 1 is subject to the exam session fee. Walk-in code tests are receiving tests only. A 5 wpm sending test may be substituted if the applicant makes prior arrangements before the session date. Contact Rich WB2LKU at 623-546-4300 or email wb2lku@arrl.net.

On February 5, 60 candidates were Licenses earned were 11 Tech, 1 Tech Plus, 1 General and 2 Extra. 27 Advanced Class licensees passed Element 4B and will be eligible for upgrade to Amateur Extra after April 15.

Kudos to the VE team who handled the 60 applicants in 2 hours.

VEs on hand:

Edward Beyer WU7A	Joe Brian AB7VY	Edson Campbell AA7TU
Jack Dow KE7ZQ	Ken Ehrhardt KK7NU	William Gadbois KC7JRY
Jeff Johnson KJ7LO	Bill Kuchinski KB7MDX	Art LaFleur KI7ZR
Shelly Newman AB7LQ	Jack Richards WA9TV	Yoshi Sano K7YS
Ray Sumner NW7R	Rick Tannehill W7RT	Harold VanDyke KD2PH
Glenn Wade N7JWF	Charles Wallace W1OSV	LeRoy Woodruff W2HTX
Dwight Yard KB7KON	Rich Piggott, WB2LKU, Session Manager, Liaison	

Year 2000 exam Schedule: 3/4, 4/1, 5/6, 6/3, 7/1, 8/5, 10/7, 11/4, 12/2.

SILENT KEY. Joseph Paul N7IBL of Sun City died Jan 23. Joe was a member in the late 80's and was also active in the Citizens Band REACT group. We extend our sympathy to his wife Shirley and family.

PUBLIC SERVICE NOTES

The Arizona Senior Olympics Millenium 2000 Games are being held from February 19th to March 5th. West Valley Amateur Radio Club will be furnishing communicators for the Road Races on Saturday, March 4th, and for the Triathlon, on March 5th, both at Sun City Grand. If you would like to volunteer your assistance, please call John Kornbeck, 623-566-2018.

Club "Emergency Communications" magnetic signs for the side of your car are available for \$7 each. Club badges (black on yellow, AZ-shaped) are \$5. See Ray NW7R to order.

BIOGRAPHY OF AL GROSS

Al Gross is a true pioneer of the wireless personal communications revolution and played a major role in establishing miniaturized portable communications. His efforts led to one of the first walkie-talkies in the early 1940's (just prior to WW II) and to development of the first pager system (in New York's Jewish Hospital) in 1950. He also successfully lobbied the Federal Communications Commission (FCC) to create the Personal Radio license spectrum in 1948, which later became citizens band radio.

In 1934 (at age 16) Al obtained his amateur radio license, and it is still current today. At the time, portable wireless communications did not exist, and very little knowledge about radio communications, circuits, designs, and propagation existed above 100 megahertz. Frequencies above 100 MHz is where Al focused his development efforts. He developed circuits and components for miniaturized portable communications that were unheard of for that era. He also succeeded in the design and construction of several battery-operated, portable, hand-held transceivers with corresponding compact antennas.

In the late 1930's, Al discovered a means to cause miniature vacuum tubes to operate in the unexplored portion of the radio frequency spectrum above 200 megahertz. Two of the models operated at 300 megahertz. These two hand-held models were used many times to successfully communicate with other amateur operators over a distance of 30 miles. After the onset of World War II, an amateur radio operator within the Office of Strategic Services (OSS) knew of Al's hand-held walkie-talkies; from this disclosure Al was asked to come to the OSS headquarters in Washington to demonstrate the radios. From this meeting, the "Joan Eleanor" two-way radio system was proposed allowing OSS agents in occupied countries and Germany to communicate with two-way radio equipment in high-flying aircraft. Al headed up this project and developed a sensitive receiver circuit that could be miniaturized. Al met with Major E.H. Armstrong late in 1943 at his office in Alpine, New Jersey. Armstrong suggested a super regenerative circuit that could be used, and Mr. Gross implemented this concept (with modification) in both the transmitter and receiver. The Joan/Eleanor project, Al Gross's creation, was classified "Top Secret" by the OSS and was made public in 1976.

Late 1944 in a classified meeting with the Chief of the Radio Intelligence Branch (FCC), two of Gross's hand-held transceivers were demonstrated before the FCC Chairman and with the Commissioners. Inspired by the demonstration, FCC Commissioner E. K. Jett published an article "Phone by Air" in the Saturday Evening Post (July 1945) describing personal two-way radio communications for the public use. Mr. Gross launched Citizens Radio Corporation to design, develop and manufacture personal wireless transceivers and also started Gross Electronics to design and build other communications products. (Gross Electronics was under contract to test and develop life saving equipment for emergency use for the U.S. Maritime Commission and the War Shipping Administration. In 1948 the company was contracted by the U.S. Coast Guard to design and build a hand-held transceiver operating at 401 megahertz TRC-156.)

On March 23, 1948 at the President's Luncheon of the Institute of Radio Engineers (now IEEE), FCC Chairman announced FCC type approval of the first personal wireless transceiver for the public. It was at this affair that Major Armstrong offered his congratulations to Mr. Gross and his company.

In 1950 Al demonstrated before the FCC the possible use of a hand-held transceiver as a "cordless remote telephone", which became the first paging system of its kind. (Restrictions in place at the time prevented the application of this technology for the public.) In September 1958 Gross Electronics Co. received FCC type approval for mobile and hand-held transceivers for use on the Class D 27megahertz frequency allocation. In 1959 Gross Electronics Co. designed and manufactured a battery operated unattended weather station used by the U.S. Navy that was parachuted into the Antarctic.

It is clear that Mr. Gross was a true pioneer, and helped lead the way to today's wireless personal communications revolution. Today, Mr. Gross remains an active engineer at age 81 never missing an opportunity to tell a group of engineers or students about the excitement of wireless and about the tenacity required to invent. He is an inspiration to those who meet him, and he carries with him a terrific legacy that is worthy of recognition by the IEEE.

FOR SALE

Kenwood HT 144 MHz Model TH-22A/22AT complete with Battery packs, two chargers, 2 antennas, Instr Bk, excellent condx; \$70.

Collins R390A receiver. Excellent appearance and wkg condx, w/manual, Top and bottom covers, wt 85 lb; \$500 (firm). Buyer must pick up at Prescott Country Club.

2 Mtr 5/8 wave antenna Hamstick by Lakeview Co, Model 26-6990, exc condx, easy to install; \$10.

With exception of the R390A, all items are at Sun City QTH.

Al, W8PAL - Office phone: (480) 814-6387

Mini-Products 1/2 wave vertical (no radials needed) for 20-15-10-& 6 meters. \$25 or best offer.

Prop pitch rotor and selsyns \$195

Ron, K6OP - 623-546-5710

Hi-Gain tri-bander beam for 10-15-20 mtrs. Also a mini-tower 20-25 ft crank-up with winch. Cheap...make offer

Fred, N7BB - 623-979-5953

CQDX de Frank Smith AH0W OH2LVG

DX-congratulations are in order for the Central Arizona DX Association's recent DXpedition to Myanmar as XZ0A. This was a very large team representing several countries who came home with over 80,000 contacts in the logbooks. QSL via W1XT. The operation was a new IOTA activation from Thahtay Kyun Island (AS-144).

A large DXpedition is planned for March 1 through 8 from Clipperton Island FO with an international team of 12 operators. It will be many years before another group makes the long voyage to Clipperton, so be sure and work this one.

Just after this a "new one" DXpedition, Chesterfield Reef will be activated as TX0DX by a large multi-national team headed up by Martti Laine OH2BH. This is scheduled for March 15 through April 1st.

It has been reported that Monk Apollo has been issued a special callsign SY2A from Mount Athos in celebration of his 10th anniversary of activity from this very rare location. The call is in effect this entire year.

In other DX, look for Laos as XW2A by Hiroo JA2EZD, Iraq as YI9OM, Ethiopia as ET3/G4ZVJ, MacQuarie as VK0MM, Nepal as 9N1AC, Easter Island CE0Y, Svalbard as JW6WEA and JW7FD, Eastern Kiribati as T32B, Ivory Coast as TU5IJ, Burundi as 9U5D, Sint Maarten PJ8, Ghana as 9G5VJ, various calls from Midway KH4, Revillagigedo as XF4LWY, and much more.

Best 73, GD DX, CU in the pileups!

SOME SORT OF LOGICAL APPROACH TO ELIMINATING VEHICLE RFI

NOTE: Many good books are out there discussing interference. I have found the FCC bulletin CIB-2 Interference Handbook and the Interference Handbook by: William Orr and William Nelson excellent resources. You may want to include these in your shack's library.

You are experiencing vehicle noise, what do you do? Well, here are a few ideas to help you reduce or eliminate the problem.

The process is time consuming and *irritating* to non-Hams that you recruit to help you. But keep going in a logical one step at a time process. *Document your successes and failures*, this will help you decide what needs to be eliminated or replaced or what filters to buy.

1. Contact you Dealer, many new vehicles have critical cable placement paths and the service department may be able to inform you on proper routes for your radio cables.
2. Ensure all vehicle grounds are sound. If large metal parts like the trunk lid do not have any ground strap, install one. The strap material of preference is braid. Either you buy braid, or you can get some from RG-8 coax cable. The auto industry calls this "BONDING"
3. All connections made must be to bare metal, scrape paint and primer. Use exterior tip star washers. They cut into the metal for a solid connection. Remember, corrosion is your enemy! All connections are to be mechanical crimp type and done with the proper tools. Your results will be only as good as your work.
4. Alternator whine, spark plug RFI etc. can all be controlled or reduced with after market filters. **BE SURE TO CONTACT YOUR DEALER** to verify your warranty will not be voided with these filters added.
5. Some dealers today, are actually sensitive and informed about vehicle **RFI**. Mostly to the thanks of portable telephones and computers. Sometimes when the dealer replaces say a noisy windshield wiper motor or washer pump your noise problem is gone. So, speak to your service advisor to see if they can offer any help.

SUGGESTED FILTERS:

RADIO SHACK 20 amp noise filter 270-055

JC Whitney 312-432-62.02 03GB7093N -or- 81GB3768A

73, Marty, KA7GKN [the arm chair troubleshooter]