



Fresno Amateur Radio Club Newsletter

April 2010 Volume 72, Issue 4

Our next meeting will be April 9 at 7:00 PM. Lewis KI6YWX will be presenting the program on CW and CW keys. Meeting place: Cedar Lanes Bowl—Cedar and Shields Aves. Come to the meeting and enjoy the camaraderie with your fellow hams.



The Prez Sez

FARC General Meetings

Are held the 2nd Friday of each month, 7 p.m. at Cedar Lanes unless otherwise noted.

2010 FARC BOARD MEETING DATES

1st Tuesday of each month
Woodward Park Library at
Champlain and Perrin.

FARC Nets

Morning Drive Time Net:
Weekday mornings-7:30—
8:00 a.m.

W6TO/R 146.940

Tech Net:

Wednesdays @ 7:00 pm
W6TO/R 146.940

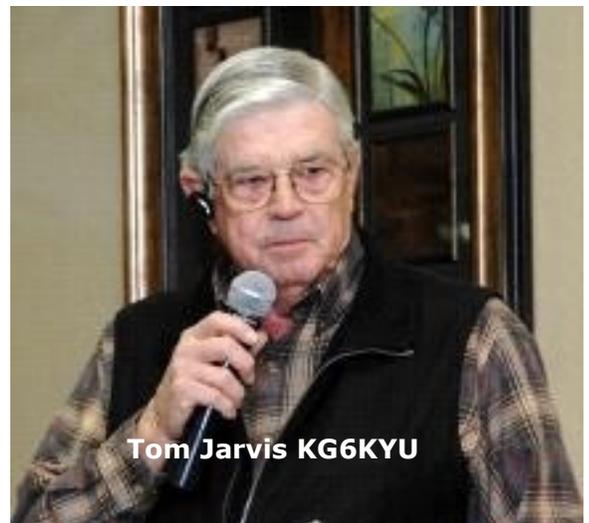
FARC Net:

Sundays @ 7:00 pm
W6TO/R 146.940

CQ CQ

The weather has changed , now is the time to start our projects. When starting some of these we should take a minute to look around to see what is above or beside our work area. What does a tree and a tower with antenna have in common? Height is the answer, When removing limbs from a tree or lowering a tower you must check to see if the area is completely clear.

The neighbors fence, power lines, direction of antenna when its being lowered all these things come into play. Safety is our upmost concern on all these project, so take your time, look around before you start. Taking a minute to observe will give you many rewards and a project that is completed correct and safe.



Tom Jarvis KG6KYU

73,,, Tom, KG6KYU

Fresno Amateur Radio Club

FARC BOARD OF DIRECTORS

FARC Officers:

Tom Jarvis, Pres. - KG6KYU	kg6kyu@w6to.com	(559) 916-2445	12/2011
Craig Carter V.P. —K6QI	k6qi@k6qi.com	(559) 284-1722	12/2011
Jim Erbe, Sectry - WA6NIF	wa6nif@w6to.com	(559) 222-7524	12/2011
Ron Hunt, Treas - N6MTS	n6mts@w6to.com	(559) 289-8514	12/2010

Board Members:

Aaron Lusk, K6USY	k6usy@w6to.com	(559) 301-1022	12/2010
John McGraw, AE6QR	No E-Mail	(559) 255-2349	12/2010
Ken Holden, —WA6OIB	wa6oib@w6to.com	(559) 323-6753	12/2010
Charles McConnell, W6DPD	w6dpd@w6to.com	(559) 431-2038	12/2010
Dave Smith, W6TE	w6te@msn.com	(559) 323-6095	12/2011
Joseph Capell, W0PJD	W0PJD@me.com	(559) 225-3582	12/2011
Jack Baker, AC6LT	ac6lt@CVIP.net	(559) 297-4311	12/2010

Mark your calendars for every Thursday, for the lunch gathering at the *Silver Dollar Hofbrau* at the corner of Hwy 41 and Shaw. It starts at 12 noon and there is a table reserved in the back room.

Also every Monday and Saturday at the *Country Waffles* at Blackstone and Dakota starting at 7am.

Lastly, Breakfast every Tuesday at *Yosemite Falls Cafe* at Blackstone and Shaw starting at 8am.

Support our advertisers in SKIP. They support us not only in revenue for the club but they also allow us space on the counters and shelves for copies of SKIP and other club announcements.



Joe Cardoza III WA6FFJ and dad Joe Cardoza II WB6JQC

Amateur Radio Event Calendar

<u>Date</u>	<u>Event</u>	<u>Date</u>	<u>Event</u>
April 2	CARP General Meeting	May 4	FARC BOD Meeting
April 3	DX Breakfast	May 7	CARP Meeting
April 5	FARC BOD Meeting	May 14	FARC Meeting
April 9	FARC General Meeting	May 14-16	DAYTON
April 10	CARP T-Hunt & BBQ	May 21	SJVARs Meeting
April 16	SJVARs General Meeting	May 25	QCWA Lunch
April 16-18	Visalia DX Convention		
April 27	QCWA Lunch		
April 30	EMCOMM WEST—Reno		

Fresno Amateur Radio Club

Editors Comments by Dave Smith W6TE

Dear Friends,

The next two months are very busy with Amateur Radio Conventions and activities. The Visalia DX Convention is April 17th—19th, EM-COMM WEST is April 30th (in Reno) and the BIG DAYTON HAMFEST is May 14—16. I hope you can attend some or all of these events and enjoy!

This coming Saturday (April 10th) is the first CARP fox hunt of the year. Yours truly, W6TE, and John, K6MI will be the fox and it's your job to find our "den" - (hidden transmitter.) We will provide a BBQ at the conclusion of the event. Further information is provided in SKIP. Please come out and participate. I think you will find some "real" surprises!

Because of a conflict in obtaining a room at the Woodward Park Library, the FARC BOD meeting will be held on Monday April 5th at 6:30 PM instead of on Tuesday, April 6th at 7:00 PM.

V.P. Craig K6QI suggests that since Lou KI6YWX is doing a talk on Morse and keys it

might be interesting if everyone brought their favorite key to the meeting.

Visalia DX Convention:

by Michael S. Higgins (K6AER)

The Visalia DX Convention from Visalia, California will commence from Friday noon (4/16-18/2009) until Sunday noon at the Holiday Inn. The special event station N6V will be QRV from Noon until Sunday morning. Principal bands of operation will be 20 and 40 meter SSB and maybe some higher bands if the propagation Gods permit it. CW operation is catch as catch can should someone bring a paddle.

This year the Southern California DX Club has gone all out to bring an outstanding program, terrific \$35,000 raffle, great speakers, good food, a wonderful YL tour and short waits to sign up for banquet seating.

Thanks to Richard Pack, KE6SHL, for providing the photographs included in SKIP. Ed.

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Membership Attendance for March. Winner W6IJY Johnny Souza was not present



Local Amateur Radio Repeaters

<u>Organization</u>	<u>Call Sign</u>	<u>Frequency</u>	<u>Offset</u>	<u>PL</u>
AARC	WB6QDN	146.610	-	NONE
CARP	K6ARP	147.675	-	141.3
CARP	N6JXL	224.380	-	141.3
CARP	K6ARP	444.725	-	141.3
CARP	NI6M	440.350	+	141.3
CONDOR	WB6BRU	224.900	-	156.7
FARC	W6TO	146.940	-	NONE
FARC	W6TO	223.940	-	NONE
FARC	W6TO	444.200	-	NONE
FRESNO	N6MTS	145.230	-	141.3
KINGS ARC	KA6Q	145.110	-	100.0
KJ6KO	KJ6JO	927.6625/902.0125	-	146.2
MADERA ARC	W6WGZ	147.180	+	NONE
MADERA ARC	W6WGZ	441.175	-	146.2
QCWA	WQ6CWA	146.850	-	141.3
QCWA	WQ6CWA	443.250	+	107.2
RACES	N6HEW	147.150	+	141.3
SJVARs	KE6JZ	146.820	-	141.3
TURLOCK ARC	W6BXN	147.030	+	100.0
WA6NIF	WA6NIF	444.100	+	100.0
WIN/SYSTEM	K6JSI	146.790	-	100.0

Birthdays:

Perry Foster K6XJ
 Hymann Wood KI6ZOV
 Bob Hervatine N2NS
 Sharon LaFroti KI6ZOR

Apr 10
 Apr 16
 Apr 22
 Apr 27

Anniversaries:

Karl/Pat Kramer W6TUI Apr 21
 David/Spouse Austin KA6VTA Apr 10
 Bob/Patricia Airhart WA6RTS Apr 29

CARP SPONSORED FOX HUNT (TRANSMITTER HUNT)

When: Saturday April 10, 10AM

Where: Starts at Letterman Park in Clovis

There will be a 15 mile radius that the fox will be hidden within.

A BBQ will be served after the hunt.

We need a headcount for food so please email Rob AA6EG if you plan to participate

AE6GE@ae6ge.com

Fresno Amateur Radio Club

Amateur of the Month RON HUNT N6MTS, by Joe Capel W0PJD

This month's ham biography is Ron Hunt, N6MTS, on the club board of directors and treasurer of FARC.

Ron was born in Woodland in northern California but his family moved here when he was one year old making him almost a native.

He went to Clovis schools including Clovis High School graduating in 1967. He attended Fresno City College and then Fresno State College finishing in 1973 with a degree in industrial technology, electronics, of course.

His ham career started when he and his Dad first licensed. His first FCC ticket was a novice with the call letters, WN6KUP and later as a technician class as WB6TJJ. He was a high school sophomore for those first call letters. His first rig, he recalls was a Hallicrafters SX 100 receiver and a Globe Scout CW transmitter. In later high school and



college his interest wained but when he was working for Channel 24 he met a fellow named Pat Fennacy, W6YEP who encouraged him to renew his amateur radio interest and the rest is history.

His ham radio favorite aspects have been primarily VHF, UHF, microwave and repeaters. He has designed and set up many such systems including the 145.230 repeater which bears his call and was for many years at Fresno State on the roof of the industrial technology building and now resides on Bear Mountain. When it was at the university it was associated with the ham radio station eventually called W6FSC. He and Dave Smith, W6TE set up a state-of-the-art operation on all bands and nearly all modes including EME. That station was finally dismantled in 2006.

He and his wife, Lisa have two sons and now a granddaughter. His son, Glen is also a radio amateur.



Even in high school and ever since, he has worked in the field including Clovis Appliances, Audio Sales, TV Channel 24, TV Channel 47, Rusco Electronics and then in his own business in Electronics Manufacturing and Design called Diversity Systems. Additionally, he worked with another ham Jerry Brayton, WB6AIE, repairing and calibrating medical and scientific equipment.

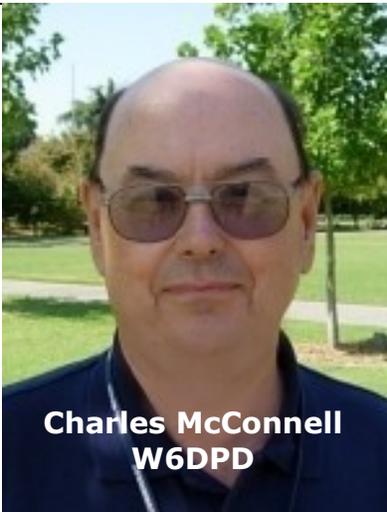
In 1984 he returned to what is now called California State University Fresno as a technician for the Engineering and Industrial Technology departments working with faculty and students. He continues in that position.

<http://www.repeater-builder.com/molotora/gontor/gontor.html>

There are 145 of these available (a bakers gross) from SBMS at a special discounted price. You have to have your order in before the end of the meeting. Cash only, and in small bills. Delivery at your own risk, FOB Point Nemo.

THE DX CORNER by Charles McConnell W6DPD

If you want help with DX, you can contact the local members of the Central California DX Club for some assistance. Charles W6DPD 431-2038, Perry K6XJ 299-2802, or Jim WS6X 292-8353 can give you advice. The big thing about finding DX is to tune the bands. Check out the Central California DX Club Web page at <http://www.ccdxc.org> for information and useful links.



The local DX'ers meet on the first Saturday of the month for breakfast at Carrow's, 4280 N. Blackstone in Fresno. The group gathers between 0700 and 0800. All are welcome.

The 2010 International DX Convention is April 16-18 at the Holiday Inn in Visalia. Check www.dxconvention.org for information.

The Sun has become more active in 2010. The month of February was the first month in 3 years when there was no blank sun days, that is, no sunspots. As a result, the bands have been improving as the sunspot numbers improve. Check out www.spaceweather.com and www.solarcycle24.com for information on the solar cycle. The higher the solar flux and the lower the A and K Indices, the better the band conditions.

The address of the Sixth District QSL Bureau is P. O. Box 970, Fairfax CA 94978-0970. You can send up to 10 address labels and \$0.70 for each envelope to the address above. They will put 1 unit of First Class postage on the envelope.

Postage rates around the world are constantly changing. To see current rates go to http://www.qsl.net/w9ol/IRC_Chart.htm where you can find the current postal rates for most of the countries of the world.

If you don't get a DX Bulletin and you belong to ARRL, you should register on the members only

web page and check the box for the ARRL DX Bulletin. This one is emailed each Thursday. Or you can go to the ARRL web page in the News/ Bulletin section and view the bulletins there. You can also read the OPDX Bulletin or the 425 DX Bulletin on the web. Search OP DX Bulletin or 425 DX Bulletin to get the URL. You can subscribe to the Daily DX, Weekly DX or QRZ DX too. These bulletins will keep you informed of DX operations and QSL information.

The following operations are scheduled:

- Bahrain A92IO now through August 2011
- Wake Island KH9/WA2YUN now through 2010
- Willis Island VK9WBM Until May 2010
- Papua New Guinea P29VAA now through May 2010
- Uganda 5x7JD now through May 31, 2010
- Marshall Islands V73NS now through 2009 and maybe 2 more years
- Djibouti J28AA now for at least a year
- Bahamas C6ANM Now through April 2010
- Malawi 7Q7HB through April 2010
- Maldives 8Q7IA now through May 2010
- Marion Island ZS8M mid May 2010 for 13 months
- Angola D2CQ February 2010 for a few years.
- Aves Island YV0A early 2010??
- Iraq YI9PSE April 2 to April 12, 2010
- Mauritius 3B8SC April 7 to April 21, 2010
- Vietnam 3W6C April 10 to April 18, 2010
- Annobon Island 3C0C DELAYED DUE TO CONSTRUCTION ON RUNWAY
- Palestine E4X May 28 to June 6, 2010
- Maldives 8Q7AT May 23 to June 4, 2007
- Central Kiribati T31X May 22 to June 1 2010
- Tokelau ZK3 April 2010
- Marion Island ZS8M April 2010 to April 2011
- Vietnam 3W6C April 10 to April 18, 2010
- St. Pierre & Miquelon FP July 5 to July 14, 2010
- Sable Island VY0 sometime in September to October 2010
- Kermadec ZL8X November 19 to December 5, 2010
- Juan Fernandez XR0ZN postponed to the end of 2010

Watch the DX Bulletins for up to date information. As the time for the operation is at hand, watch the DX Summit (www.dxsummit.fi) for listings. There are a number of state QSO parties each year. Check the contest corral in QST or the ARRL web page. State QSO parties are a good place to collect states for your Worked All States award. ARRL Log Book of the World now supports the Worked All States Award.

Good luck, tune the dial, and listen.



Central California DX Club History

As remembered by the members

The Central California DX Club, Inc., was officially organized August 2, 1981. The original "brainstorming" meeting took place in Visalia at the Holiday Inn in July of 1981. The group, led by Earl Warford, W6MEL, who was the sparkplug in getting the club started, discussed the feasibility of forming a DX Club which would serve Central California. The reason the CCDXC was formed was that the Northern and Southern California DX Clubs were beyond travel distance for valley hams, which made it difficult to attend their meetings on a regular basis.

At a second meeting in August of 1981, the gathered group made several key decisions:

- To go ahead with the formation of the CCDXC;
- To incorporate the club, and develop [BYLAWS](#);
- To affiliate with the American Radio Relay League (ARRL);
- To obtain liability insurance coverage;
- Anyone who attended the meetings of July and August would be charter members

Henry Mack, WA6FPB, a lawyer, took care of the incorporation with the State of California.

The charter members were: KD6QA Peg Austin (SK), WA6UOR Harry Billings (later N6ALR SK), WB6VIN Carl Boone (SK), W6BYH Leon Brammer (SK), WD6ACC George Cantrell (SK), W6KPC Frank Clement (lives in Bakersfield), KB6AR Dan Crowe (SK), K6BPY Gerry Decker (SK), **K6XJ Perry Foster**, W6PCS Jerry Fries (SK), **W6RU Terry Gaiser** (Was N6UR), W6UZ John Gray (lives in Virginia), W6BW Gus Grom (SK) **K6TX Byron Gutheil**, K6OZL Ron Hill (now K6UR and living in Hanford), W6OV Dick Kemp (SK), W6MND John Koch (SK), KE6GM John Luthy (now N7JL, lives in Oregon), WA6FPB Henry Mack (SK), **W6DPD Charles McConnell**, W6XP Stan Ostrom (lives in Arroyo Grande), N6DTB Don Pipkin (SK), W6BVM Don Rinaldi (lives in Orangevale), W6ZZC Earl Rouse (SK), **K6DT Ed Shuler**, WD6GFF Richard Smith (lives in Madera), **W6GR Bob Smith**, **N6AWD Fred Stenger**, W6IFC Lyman Treaster (SK), W6MEL Earl Warford (SK), W6YO Jules Wenglare (SK), and WA6JDB Jay Yake (now W6JDB and living in Oregon). The names in bold are current members of the CCDXC. Over the years of the club, there have been probably over 100 different names on the club rosters, but never all at once.

Today, the CCDXC meets several times a year on Saturday for a lunch meeting in Tulare or Visalia CA. There is a business meeting and a program. The club conducts the Summer DX Super Sprint between the months of June through August with the goal of working as many DXCC entities as possible during that 3-month period. The club has some other operating events from time to time. The DX'er of the year is announced at the breakfast meeting held the Saturday morning of the International DX Convention. The [Club Membership Roster](#) usually has over 50 members on it.

FRESNO ENCOMM ARES/RACES by Dan Pruitt AE6SX

This Month showed some reality checks, some were planned and some were forced upon us but all demonstrated the need for training. We established some clearer goals and outside influence rendered new tools and support channels. I think we will look back and see March as the opening of a new path in EmComm, and a welcome one.



As each of the EmComm entities delved into their goals, the broad spectrum of continued procedural training, operational training and leadership training needs were obvious. Our group, lead by Joe WA6FFJ began to upgrade our traffic handling abilities with a presentation at the last meeting and is following up with training session's specific to message creation and procedures. I cannot over stress the important nuances associated with proper technique that are only acquired in practice. These basic skills help an operator every time he is on the air.

FCC: They are considering a blanket waiver for Hospitals. This is intended to allow Hospital personal to operate during disaster drills without risking violation of Part 97. How or if this will happen and in what form it will take, is too soon to speculate, however, my personal thought is they have already allowed the Government this option for the grater good and similar could be said for Hospitals.

RACES: You will be seeing knew Fresno County ID cards of the modern style. Bar-coded, picture and all.

There has been a recent re-establishment of RACES in Illinois. This could be the new template for RACES.

Glen N6HEW has been conducting simplex

drills and Lew KI6YWX, our NCS for this month, mapped out the coverage area, for those able to find the simplex mode on their radios, hi. Glen is revising the simplex frequencies from the 1994 plan and intends to continue the exercises to include our outlying areas via relay procedures.

ARRL ARES: There is to be a new committee reporting to the Board of Directors with a representative from each Division, specifically to report on happenings regarding EmComm and ARES. Our rep is the Manager of East Bay Section, Jim Latham AF6AQ. Hopefully this will establish a more direct information channel and a National guideline from ARRL.

We are getting information that the new 'Advance Emergency Communications Course' will roll out with the New ARRL Website. If you have interest in the new course, contact me, direct at ae6sx@fresnoares.com, with the SUBJECT: advanced course. Thank you.

ARRL ARES Official vest (purchase on website):



SATERN: We can't leave out the Salvation Army as they are wishing to establish a permanent presence in the Fresno "Regional" area. Captains Dwaine KG6SYA, and Kristin KI6QED believe they have enough SATERN people to begin planning their mission. This will include enhancing the station at the Citadel and their disaster plans. 73 de Dan AE6SX

Web: www.fresnoares.com or www.fresno-races.net. You can contact us directly at info@fresnoares.com

(Continued on page 9)

Fresno Amateur Radio Club

(Fresno ENCOMM/ARES Continue from page 8)

NET: Monday 1930 hrs local on 147.150+, PL 141.3

Monthly: meetings, the 4th Thursday of each Month

Salvation Army Citadel, 1854 N. Fulton St
1900 hrs

EmComm and Coffee: Time is 0830 hrs, 3rd Friday Yosemite Falls Cafe on Blackstone and Shaw.

Did you know that there are power restrictions on operation in the 70 cm band based on your location? This might be important for VHF+ contesters, especially rovers. The rule is stated in Part 97.313(f) and cites this footnote of CFR 2.106 - <http://www.fcc.gov/oet/info/maps/us7/>. The restriction applies in areas such as those near military bases that use 420-450 MHz communications. (Thanks, Joel WU8Y) Courtesy of the ARRL Contest Update for March 31, 2010.

Here's a picture of how I connected the 1/2 of a TH3Jr reflector to make it a vertical antenna. I just talked to 5B/US8ITL, I believe on Cyprus, on 21.297Mhz at 1715Z. I did hear 9K2GS in Kuwait on 20 earlier. So the vertical works!

Jim WA6NIF



I do not know if this has been proposed before, but since the first of April is here, I suggest that the Central Valley congregate and form a strong voice for the valley, especially in Ham Radio.

With that thought in mind, I propose that we get all the valley clubs together, to form a uniform protocol for operating on the various ham bands, especially VHF and UHF.

So, with out further ado, I suggest we form the Central Radio Amateur Protocol, to uniformly set our standards. CRAP should be mighty and strong!

STUART WB6VRJ

Check out the Rockwell Automation's Retro Incubator at:

<http://video.google.com/videoplay?docid=5125780462773187994>

I have been thinking about ten meter antennae. I do have a dipole, up about thirty feet, and aligned so the maximum radiation is east-west. But for Wednesday nights, I have a TS-50 hooked up to a Cushcraft Ringo vertical antenna. That's for the 28.140 CW net, and also for the 28.445 USB net. Polarization of an antenna does make a difference. I hardly hear anyone on the dipole, but I sure hear a lot on the vertical. One of the net control stations can switch between horizontal and vertical, and boy one can sure hear the difference. Yeah, if I changed the alignment of the dipole, I am sure I would hear a lot more ten meter stations, but it is part of a Alpha-Delta all band dipole, so I do not want to move that. Besides, on 40 and 80 meters, I get great coverage and good signal reports with that dipole. Yeah, I know, my DX is Kansas-but what the heck!

Stu WB6VRJ

April 16, 17 & 18, 2010



The 61st Annual International DX Convention sponsored by the Southern California DX Club will be held at [The Holiday Inn Hotel & Conference Center Visalia](#). If you have general questions or comment please [e-mail](#) us or for specific questions see the [contacts](#) page for the individuals responsible for your area of interest. The International DX Convention is the world's premier DX convention, if you're a DXer or interested in any aspect of Ham radio you need to be at Visalia. Top DX operators from around the world will be there. Meet the big guns from the US, Asia, Europe, Africa and Oceania. Meet the people on the other side of the mic or key, shake hands with the person you have had a sched with for the past 10 years but never met. Don't forget the YL's we will have something special for them as well.

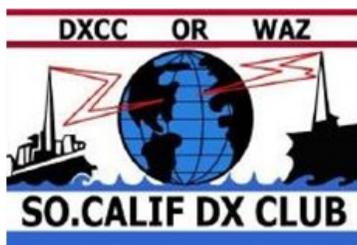
The top DXpeditioners from every continent tell you how they did it. Learn the secrets for big signals on top band. How to have fun and adventures chasing IOTA, contest forum, antenna forum, DX forum, seminars for everyone from the seasoned pro to the beginning DXer. Saturday night banquet, Sunday breakfast, manufactures midway where you can talk to the people who design and use the best of DX equipment, and raffle prizes the likes of which top even the famed Dayton Hamvention.

The International DX convention has now joined the growing ham community on Twitter. You can now follow the DX Convention on Twitter by going to www.twitter.com and signing up for an free account. Once you have signed up and logged in you can go to the [DX Convention](#) and click on follow.

DX Convention Twitter Feed

- The programs for this year have been added to the site and the major prizes are now listed. www.dxconvention.org
- The programs & prizes are updated on the web
- Reminder: as soon as you get your registration number you can email for banquet seating.
- Don't forget to sign up for this years contest academy sponsored by the No. Ca. Contest Club.

The International DX Convention has been proudly sponsored alternately by the [Southern California DX Club](#) & [Northern California DX Club](#) for the past 60 years.



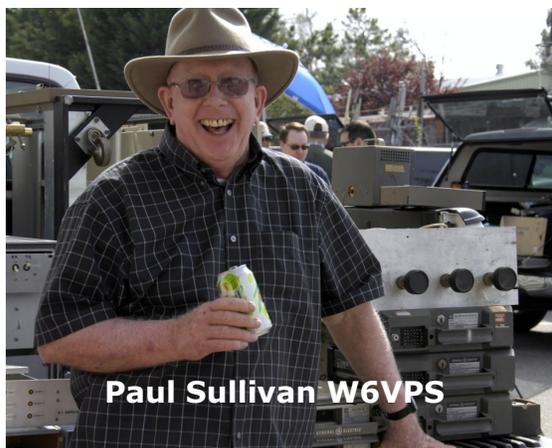
M2 Gathering Photos: March 20, 2010



John Morrice K6MI



Benny Williams KW6N,
Ted Miller W6TLM



Paul Sullivan W6VPS



Chip K7JA

THE BLACK HOLE By DAVE BULLOCK

Every teenager dreams of working in a giant warehouse full of discarded nuclear test equipment, well used high-pressure vacuum fittings and an endless assortment of puzzling devices which may or may not have any value in the modern era. Ok, so maybe not every teenager has this dream, I was and still am somewhat of a strange person, but in High School in New Mexico, this [particular dream of mine came true](#).

After tooling around the [Los Alamos National Laboratory \(LANL\) Library](#) and the Bradbury Museum for the better part of a day, my father took a break from coding the labs IBM AS/400 systems he was responsible for and took me to The Black Hole, also known as the [Los Alamos Sales Company](#). He introduced me to Ed Grothus (photo below), an eccentric old fellow who had worked for the lab (what the locals call LANL) until being let go after marching in a peace protest in the '60s.

Ed offered me a job, which paid minimum wage, which I believe was about \$4.25 in New Mexico. He didn't really tell me what the job would entail, and honestly I didn't care. I had fallen in love with the endless piles of mysterious equipment that filled the former supermarket that had become The Black Hole. As it turned out my job description was quite eclectic and covered everything from taking apart electronic assemblies to recover whatever was valuable inside to helping customers find that centrifuge they were looking for to tearing old lockers out of High Schools.

I worked for Ed for 3 or 4 summers and I really enjoyed my time there. It was an amazing experience and I learned about all types of scientific laboratory equipment, how it worked, and what it was worth second hand. I had been meaning to visit the Black Hole and Ed for almost a decade, and I did just that on my [recent vacation to New Mexico](#). Here are some photos with short captions covering what I saw:



Ed Grothus shows off his Peace Obelisk, one of two identical 3 ton marble obelisks. Ed traveled to China to have the massive monuments hewn from quarried marble and then polished and inscribed. The obelisks will have a message in fifteen languages inscribed in the hematite spheres that the obelisks will rest on. He is still searching for a location to place the monuments, I recommended the [Trinity Site](#).



Except for the rusted sculptures and the "Military Surplus" sign, the front entrance to the Black Hole hasn't changed much in the decade and a half since I worked there. The former supermarket, it's parking lot and the church next door no longer sell groceries or facilitate worship, but instead provide cover to millions of salvaged scientific apparatuses. His frequent customers include LANL employees who are ironically buying back the same equipment the lab sold to salvage for pennies on the dollar over the years.



[Ultra High vacuum](#) equipment is some of the most high-tech looking hardware in the world. Comprised of thick walled stainless steel and machined with great precision for even greater amounts of money, HVac or UHV fittings are designed to withstand extremely high levels of vacuum. They are used for thin-film and spectroscopy research applications which require insane levels of negative pressure.

Fresno Amateur Radio Club



This large device is a Marley High Speed Camera built in England in 1944. The camera is capable of taking 100,000 photos per second. It was most likely used to photograph nuclear or other explosions.



To the left of the parking lot in the photo above you can see the A-frame church. When I worked at the Black Hole, it was filled with especially old, and possibly valuable equipment. The parking lot has been a source of trouble for Ed through the years, after neighbors complained the city of Los Alamos ordered Ed to clean up the lot. He ended up refusing to do so, being arrested, and while he was in jail the city hired a private firm to clean up the Black Hole. Instead of cleaning the parking lot out, they sold most all of Ed's most valuable items and pocketed the profit. As you can clearly see, the yard is still not clean.



On the left are various thermocouples and spools of thermocouple wire. Thermocouple wire is made of two types of metal that register different micro-currents depending on their temperature and thus are used as electronic thermometers. The items in the middle and on the left are temperature recorders and meters.



Here are some more Ultra High Vacuum fittings including several flexible tubes and a vacuum chamber. The vacuum chamber shows a copper ring which, when perfectly clean, creates a strong gasket where plastic or rubber would fail structurally. If the vacuum chamber were to be used, the copper gasket would have to be replaced because even a tiny amount of contamination would cause the seal to fail. On the lower left of the photo is a fitting that has been sealed with tape to keep out the contamination.



Along the back wall in the photo above are [Nuclear Instrumentation Modules](#) and the racks they fit in to, called *NIM Bins*. These self contained modules provide a multitude of tools for nuclear research and development. The NIM Bins are made by several manufacturers, but the modules are mostly interchangeable. There is quite a good market for NIM Bins and modules, as evidenced by a good friend of mine who has the world's largest private collection of NIM Bins and modules which he makes a nice living selling.

Fresno Amateur Radio Club



The Black Hole's library is filled with tens of thousands of highly technical books and manuals for some if not most of the items for sale at the Black Hole.



The greenhouse is a new addition to the Black Hole and is filled with a fairly wide assortment of glassware. I was looking at a condensing column and mentioned that it would be good for distilling. One of the employees who was hanging out said that people use those to recover solvents from methamphetamine manufacturing.



Oscilloscopes measure frequency and amplitude of alternating current signals and display them as a moving graph. These 'scopes are fairly outdated and like many types of measuring equipment have been reduced in size and cost due to digital and computer based systems. You can buy a

USB oscilloscope that uses your computer as the display for under a hundred dollars.



The beautiful New Mexico sky provides an interesting contrast to the massive vacuum chamber and bomb casings that litter the supermarket-cum-salvage yard's parking lot. Several summers before this photograph was taken, a massive fire burned the hills in the background. Ed Grothus snuck passed the fire-line and fought the fire in his own back yard, likely saving The Black Hole in the process.

Ed Grothus is the most photographed and written about person in Los Alamos. He is quite a character and his amazing collection of what some might call junk, but I call gold, must be seen to be believed. If you're ever in Los Alamos and have a few hours to spare, stop by the Black Hole and explore.

Sad news: Ed Grothus, founder and proprietor of the post-apocalyptic surplus store the "Black Hole," has passed away at age 86.

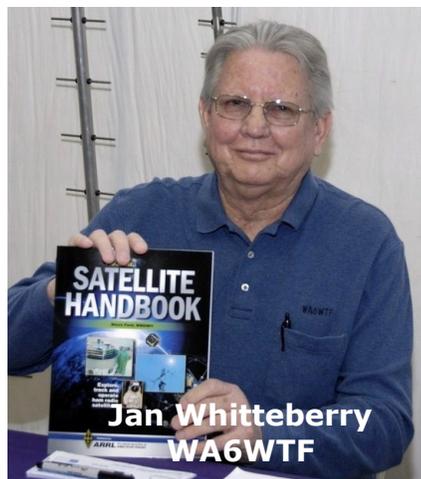
Ed is a former employee of the Los Alamos National Laboratory -- America's R&D facility for nuclear weapons -- and The Black Hole is his masterpiece; an improbable combination military surplus outlet, pacifist shrine, and "museum of nuclear waste."

Ed was on hand when we stopped by, so we had the opportunity to talk with him and watch his presentation on the perils of atomic warfare. Though he's clearly spent a lot of time in the desert sun, he's a very likable character -- articulate, thoughtful, and passionate about his cause.

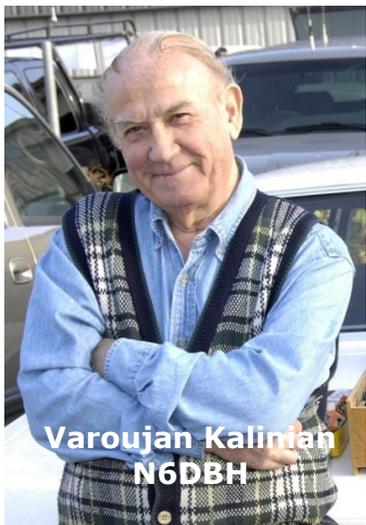
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Jason Boyer N6EY, Craig Carter K6QI, Carole Whitteberry W6TTF



Jan Whitteberry WA6WTF



Varoujan Kalinian N6DBH



Duane Lutz KI6QEL

MORE M2 Gathering Photos: March 20, 2010



Stuart Holm WB6VRJ and M2 employee



Jim Nelson W6ALE, Ken Holden WA6OIB, Pat Fennacy W6YEP



"The Food Line"



Bob Airhart WA6RTS, Jason Boyer N6EY, John McGraw AE6Q, RCharles McConnell W6DPD

Fresno Amateur Radio Club



2010 Dates:
 January 9
 February 13
 March 27
 April 24
 May 29
 June 19
 July 17
 August 21
 November 20
 December 11

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Exams for all Amateur license classes will be conducted on the following dates in Fresno California. All exams are given on Saturday and begin at 9:30 AM.

May 8

Aug 14

Nov 13

LOCATION:Bonaventure Mobile Home Park, 1724 Minnewawa Ave Clovis CA 93612-2545. Exams are held in the community room.

DIRECTIONS: From Highway 99 South of Fresno, exit Clovis Ave. Go north to Shaw and turn left on Shaw to Minnewawa. Turn right on Minnewawa and then left to the Mobile Home Park.. From Highway 41 or Highway 99 North of Fresno, take Shaw Ave. exit, turn right (East), to Minnewawa Ave and turn left. Then turn left into the Mobile Home Park.

Theory exams are multiple choice. Priority mail is used to send paperwork to ARRL, who sends data to FCC via electronic mail, thus assuring the fastest possible service on new licenses, which typically arrive in about two weeks.

BRING. Two ID's, one with photo. Taxpayer ID Number (Social Security Number), or FCC Registration Number (preferred). Fee \$15.00 per test session. Bring Exact change. **Original** and **copy of Amateur License** if upgrading. Talk in on 146.94 repeater.

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**April 5th Board Meeting
April 9th FARC Club
Meeting**

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