

W6OTX**W6ARA**

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K6OTA**K6YQT**

PAARAgraphs



The Official Newsletter of the
Palo Alto Amateur Radio Association, Inc.
Celebrating 77 years as an *active* amateur radio club—Since 1937



Hands-On Show and Tell about the Latest and Greatest Ham Radio Gear from HRO.

Don Anastasia, AA6W

Don was first licensed as a novice in 1977 as WD6EPV. In 1992, Don received the callsign AA6W, as an Extra Class licensee. He earned a 2 year AA degree, in Liberal Arts from West Valley Jr. College and earned a 4 year Bachelor of Arts degree, in Social Science (History), from Santa Clara University.

Don has worked in the computer and Athletic club industries on and off since 1981. He worked for Gavilan Mobile Computer Corporation in 1981. He also worked at Anastasia's Athletic Clubs in 1991, as a front-desk salesperson and club manager and currently works part time at the Sunnyvale Ham Radio Outlet Store. During the academic school year Don a substitute school teacher for the Saratoga Union School district in grades K-8.

Don's varied accomplishments in Amateur radio include amateur radio DXCC award(s) on HF, including CW DXCC and Mixed DXCC, and Satellite DXCC award no. 152. He enjoys working DX and CW modes, and general rag chewing on HF. Occasionally, you can hear him on some of the local vhf/uhf repeaters, chatting with his amateur radio friends. In 2007, Don was the primary control operator for contact with the International Space Station via the Amateur Radio Onboard the International Space Station (ARISS). He and 22 students chatted with astronaut Sunita Williams while she was in orbit in the ISS. In Don's leisure time (what leisure time), he enjoy playing tennis, racquetball, and taking walks along the beach.

President's Corner

July 2014

Unbelievably Field Day is over for another year. Everything came off with almost no problems, except for a few I'll detail below, but the best part was that we had a great time. The weather was fantastic, the bands were great, the ops cranked out the Qs, the food was wonderful (yum!), and the company was the best. What more can you ask for?



Coming on the heels of a successful Flea Market in May, that momentum carried over to June as we made our preparation for Field Day. We had our Network Day at Doug, KG6LWE's shop where we connected all of the rigs and computers to make sure that everything played nicely together. Everything worked well in preflight, despite me having forgotten a serial cable for my K3. We rustled one up in the shop and got everything to talk. We've found over the years that this pre-testing gives us a high degree of certainty that we can actually make an 11:00 AM start actually happen, even if all of the network cables aren't working correctly. It's just like having all of the antennas color coded, as Doug has done. Pre-coding the assembly makes putting things together in the field a snap. I was able to have my station up and running from nothing in just 20 minutes. I even had pictures of the WriteLog configuration screens this year, so I didn't have to drag Rick, N6DQ, over to my station to figure out what was wrong. I just made it match the pictures, and I was good to go.

With everything locked down, when 1100J came, we got Larry, W4UAT, into the chair and in front of the

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SIX FIELD PHONES OF WWII: AMERICAN (2), BRITISH, GERMAN, JAPANESE AND RUSSIAN

A slightly different version of this article first appeared in Nov. 2013 issue of Electric Radio
 Printed with permission

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Part 2

The Japanese set had one 0.5 mF paper capacitor in its circuit which was shorted. I replaced it with a modern ceramic version. All the other nations' phones used ceramic or mica capacitors and are still in good condition. The other problem I had with the Japanese set was that the magnetic coil of the main receiver was corroded and was broken at several points, although the sub-receiver was still operational without any work. When I first discovered that the magnetic coil did not have conductivity, I figured that I could rewind it after fixing a breakage or two. But as I unwound the coil I found out that there were too many places where the coil was broken. I ended up replacing the magnetic coil component with the one taken from an American headphone, HS-33/ANB-H-1, of WWII vintage that I happened to have in my junk box. It is about the same size and electronic characteristics are very similar; it fits and works just fine in the Japanese receiver cavity.



Fig. 16 Damaged Japanese headset receiver

The physical attributes of field phones are important because the phones needed to be carried by soldiers in all sorts of weather and battle conditions; they require sturdiness, durability and portability. Here is a table of comparison, based on actual measurement I took.

phones	dimensions	weight	housing material	remarks
American EE-8B (1)	8" wide, 4.5" deep, 5.5" high	11.5 lbs (with batteries)	leather	
American EE-8B (2)	8" w, 4.5" d, 5.5" h	11.5 lbs	canvas	Post-WWII model in nylon case
British "L" MK-1	10" w, 4.5"d, 5.5" h	9.5 lbs	steel	
German FF33	11"w, 4"d, 8.5" h	11.5 lbs	bakelite	
Japanese Type 92	10.5"w, 4.5" d, 6.75"h	9.5 lbs	wood and aluminum	detachable leather carrying case
Russian ТАИ-43	10.75"w, 4" d, 8" h	9.5 lbs	bakelite (post-WWII model)	original WWII model in wood case

The German FF33 has the best-built housing in my opinion. It is an integrated case, i.e., serving both as a portable carrier case and the phone housing, and its sturdy, airtight Bakelite box is impervious to rough-handling, weather, temperature and humidity. As though to prove the point, the post-WWII Soviet field phones adopted the same material and very similar design after taking over the original FF33 factory in East Germany as part of war reparations⁶. In fact, at first glance, the post-WWII Russian phone looks exactly like the German FF33 from outside, though observed carefully, there are slight differences in dimensions and the

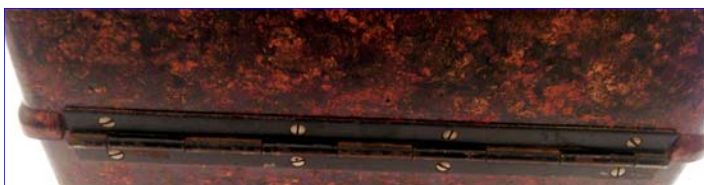


Fig. 17 German FF33's hinge



Fig. 18 Russian TAI-43's hinge.

hardware used, such as the hinge and locking mechanism.

The original Russian phone was housed in wooden case until the end of WWII (“The Great Patriotic War” in the official Russian parlance). The American phones are heavy and extremely sturdy; the phone mechanism is housed in a heavy stainless steel structure and can withstand the roughest handling, though the integral leather case of earlier model, as noted above, had problems with humidity.

The Japanese phone was built in a wood and aluminum casing which was then carried in a leather bag specifically designed for the phone, though the set could be carried and used separately from the leather carrier (none of the other nations' phones can be separated from their carrying cases as they are integral part of the sets.) The wood and aluminum combination makes it light but is delicate to the point that it reminds one of an antique Japanese *tansu* cabinetry. Whereas all other nations' phones' handsets look like an old home phone handset in black Bakelite, the Japanese one alone is made of aluminum and has a peculiar “trumpet” look. (You speak into the “trumpet”; the carbon microphone element is located right behind the receiver's magnetic coil housing; speech sound needs to travel about 10 cm to get to the microphone element.)



Fig. 19. Japanese Type 92's handset and a sub-receiver

The Japanese set comes with an extra receiver so that a second soldier can listen in on an ongoing communication though he cannot initiate a call as there is no extra push-to-talk button/lever. Also, the Japanese phone has a built-in CW key.

The British phone was built in an integrated steel case, which is sturdy and well protected in rain. But the steel case makes it heavy, in fact it still weighs 9.5 lbs despite its smallest size, and is susceptible to corrosion when paint comes off and left in rain or in a high humidity environment. By today's portability standard, 9.5 to 11.5 lbs weight of all the phones is rather hefty especially considering that a soldier most likely had to carry a rifle and ammunitions in addition to the phone. (no "s")

Of necessity, the generator's crank handle needs to stick out of the case/housing when in use. The handles of the three field phones, German, Japanese and Russian, are detachable and are stored inside the case when not in use. These handles can break away or be bent or twisted when the phones are dropped or hit by unintended force. They can also be easily misplaced if not properly stored and it adds one more ill-affordable chore in a battle field to unscrew and store them. The British phone solved this problem by allowing the handle to be tucked in a pincer metal support when not in use and the phone is being transported.

The American phone has the best design of all in this regard with a spring loaded foldable handle which retracts in a recessed area automatically when not in use. There is no need to put it away; it puts it-



Fig. 20 British phone's crank handle rest

(Phones — Continued on page 4)

(Phones — Continued from page 3)



Fig. 21 American phone's self-retractable crank handle

self away when not in use.

What to me was the most fascinating discovery in studying and restoring these phones is that all of these six phones are mutually compatible and interchangeable electronically: I daisy chained them all at the same time and they all worked fine and can talk to each other without any modification. When you crank a handle of one phone, all the other phones ring at the same time. There are some differences to be sure: the generators to ring the phones produce dif-

ferent voltages. In my actual measurement, the American phone generated the highest voltage at about 100v(AC) when you turn the crank vigorously. The Japanese set produced the lowest at about 50v and the German, British and Russian sets produced about 70-80v. Regardless of the different maximum voltages they can produce, each phone's ringer works at even lower than 50v with less than vigorous turning of the crank handles. For the receivers and microphones (all of them carbon microphones), various DC voltages between 1.5v and 12v have been applied and works just fine. I suspect all these phones can take much higher voltage. With the exception of the American phone, which uses two D size batteries, the phones use specially designed batteries of 1.5 to 3v and housed in battery compartments. I used two D size batteries in the plastic holders bought in Radio Shack for all of them to make them operational.

In terms of schematics, there are also differences but they are so minor electronically, as you see below, as to be negligible for interconnection. The schematics of all the five phones are shown in Figures 22 - 26. They are printed on the body of the phones themselves in all cases. It is of course too fanciful to imagine but, in theory, Roosevelt, Churchill, Hitler, Hirohito and Stalin could have been on their respective field phones at the same time and talk to each other on one network! By the way, these phones would make an excellent (and, to me, esthetic and fun) intercom system for home.

ANCILLARY NOTES AND THOUGHTS

It has been said that two of the most dangerous positions in combat during WWII were that of a soldier carrying a field phone at the front to report enemy position or terrain conditions ahead, and that of a tail gunner on a bomber. Most of the phones I own now, judging from the major wear and tear marks, must have seen actual combats. Unlike some radios that are traded on eBay, I have never seen field phones in NOS or NIB conditions except some American phones. The seller of

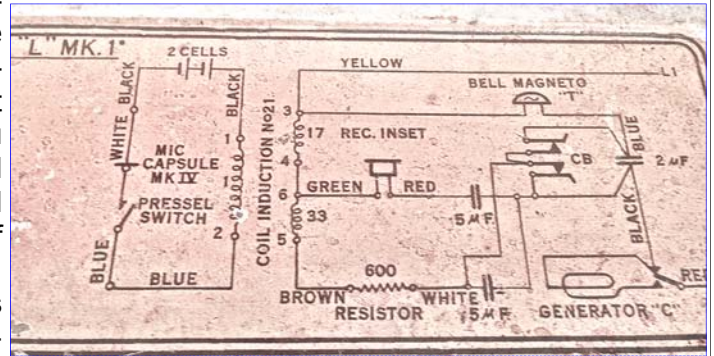


Fig. 22 British "L" MK 1 schematics

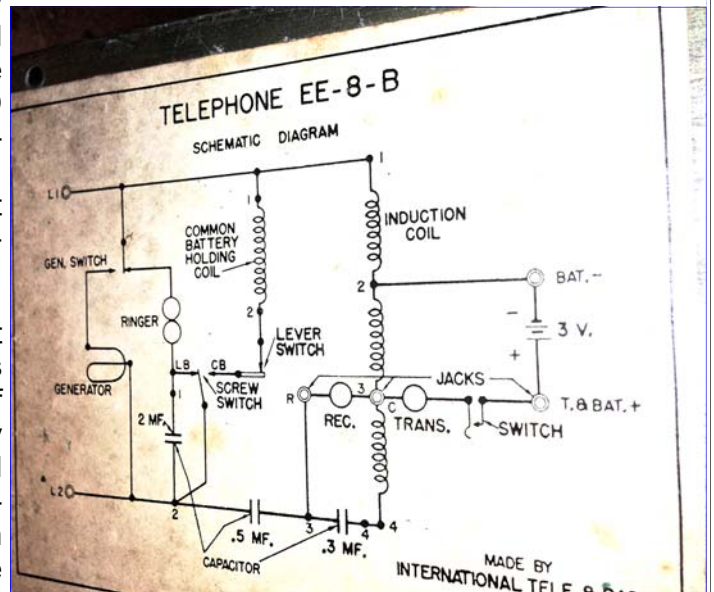


Fig. 23 American EE-8B schematics

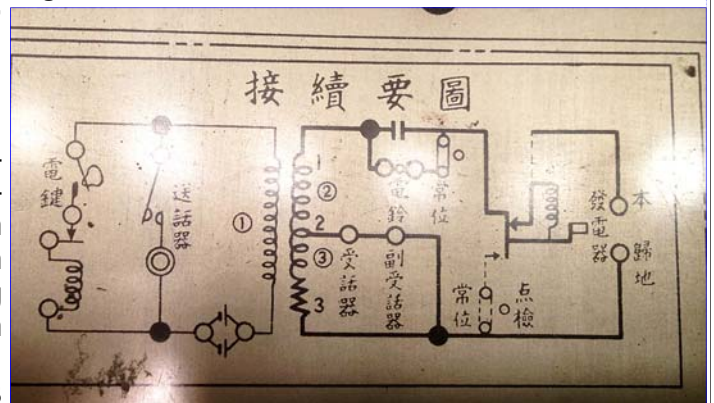


Fig. 25 Japanese Type 92 schematics

the Japanese field phone from whom I purchased included the information that he had earlier acquired it from a WWII veteran who brought it back from the south Pacific as souvenir after the Japanese soldier carrying the phone “was dealt with.”

The German field phone, the FF33, was originally designed in 1933, though the set I own was manufactured sometime in the 1940s. I bought it from a person in Spain; the seller said it has been in Spain since the end of WWII. Most of the German field phones along with radios were destroyed by the order of Allied Commanders; more WWII era German radios and phones surface from other European countries on Internet markets than in Germany (Germans began manufacturing the same phone again for the NATO forces in the post-WWII period and they look exactly the same as the WWII model except the phonetic alphabet plate affixed is often for English). All the FF33 sets have a small phonetic alphabet plate attached on the right side of the top cover. In the early sets, the plate contained such items as “Jacob” for “J” and “Samuel” for “S” but these were later replaced by “Julius” and “Siegfried.” The set I own has the latter phonetic alphabets. The change obviously tell us that the names like Jacob and Samuel, though of Hebraic origin, were considered ordinary names in the German society and that how thorough-going anti-semitism became after the Nazis took over the country.

One originally unintended use of the field phone is that of a torture device. The Vietnam War Crimes Working Group, a Pentagon task force set up in the wake of the My Lai Massacre, reported in a summary of substantiated cases that US soldiers tortured civilian detainees or prisoners of war with electric shock sometimes using field telephones along with fists, sticks, bats and water⁷. In the course of restoring the sets I inadvertently touched the terminals and bare wire several times while turning the generator handles, which is easy to do, I did get nasty shock. The voltage, 50 to 100 volts, would not kill anyone under usual circumstances but it is easy to imagine how painful and terrifying it could be if applied especially to some sensitive parts of one's body, such as genitals and vagina as was done, while one is being interrogated. I hasten to add that Americans were neither the first nor the exclusive users of the field phone as a torture device. In his well documented study of torture in modern history Darius Rejali writes that the French in Indochina pioneered the practice in 1931. Throughout WWII all totalitarian regimes such as Germany, Japan and the Soviet Union used this form of torture along with other methods. We must be reminded that democracies, such as the Great Britain and France, also employed the method and continued its use after WWII as well. What seems hypocritical to me is that, as far as what has been documented, the democracies that used the phone electro-torture did so only

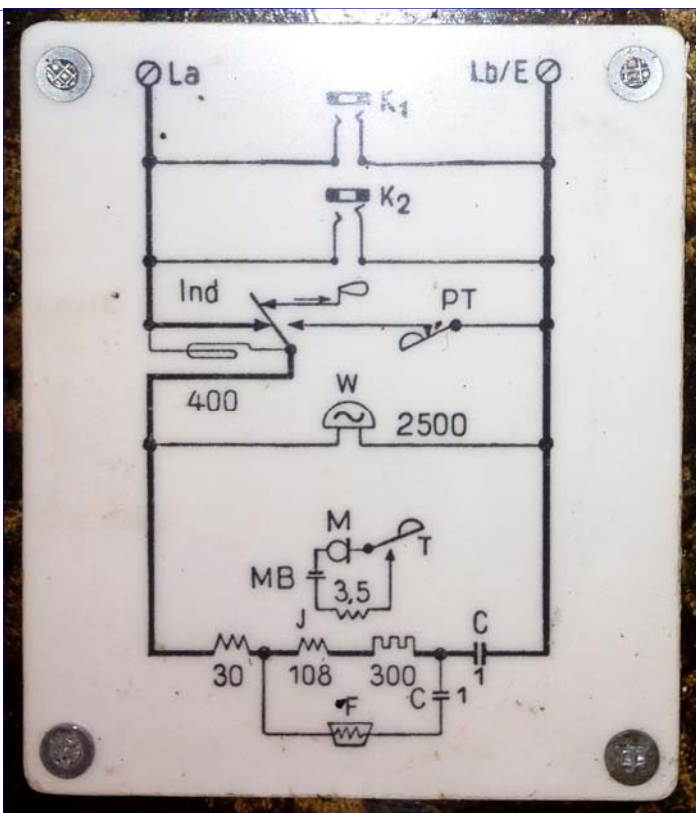


Fig. 24 German FF33 schematics

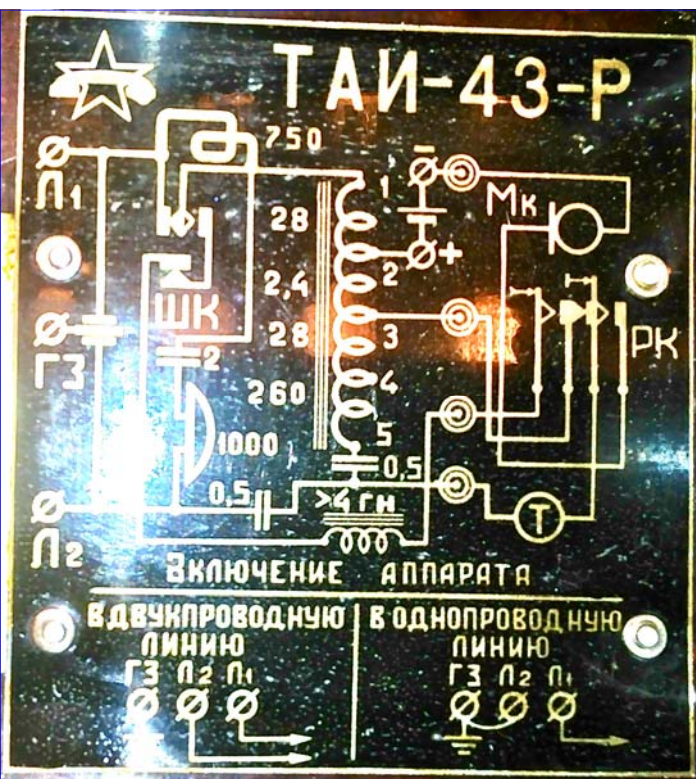


Fig. 26 Russian TAI-43

(Continued from page 5)

in engagements outside of their own countries such as the French in Algeria, the British in Nigeria and the US in Vietnam⁸.

Stringing wires for field phones in actual combat conditions has a story all of its own to tell. I came across the following story written by Paul Rako, technical editor of the Electric Engineering magazine. His father served in the US Army's 8th Engineering Corps Division in WWII.

“His unit saw fierce fighting in Hürtgen Forest..... He told me that Germany’s battlefield telephone lines used sheathed-wire pairs in clamshell enclosures. A small lever energized a machined, cam-operated mechanism that smoothly slid the connector halves into engagement. Allied soldiers had standing orders to shoot through the engineered connectors and to cut the cable with their bayonets.

In contrast, the engineers who had strung the wire for the US field telephones left a few feet of loop every hundred yards, so that slack would be available to fix even large breaks. The current loop closed through the earth; only one olive-drab, insulated-iron wire connected to the phones. The Army used iron because it was more resistive (this does not make sense - author) and stronger than copper; that strength was necessary to withstand the hardship of soldiers’ pulling it off the spools to the front lines of battle. Allied soldiers who encountered cut US-telephone wires had orders to use their bayonets to remove the insulation and tie the broken wires into knots, tugging hard to make good connections. They then threw the wire back into the ditch or bomb crater.

The results of these two engineering approaches became evident in the toughest fighting in Europe. If everything went according to the Germans’ plan, their telephones worked far better than US phones. As soon as the Germans had to retreat or give up ground, however, the US soldiers made sure that the German phones would not work for weeks or months. The Germans didn’t have enough clamshell connectors in warehouses to replace all those that US soldiers had destroyed with their weapons. The exact opposite scenario happened with US field telephones. When the US military gave up ground, the Germans cut the wires, but, as soon as any Allied troops retook the ground, they tied those knots and once again had working phones.

Certainly, the specs for the German phones were far superior. The signal-to-noise ratio and fidelity were fabulous. But those great specs were of little use when the phones didn’t work. The US phones worked well enough in real-world battlefield conditions.”⁹

I suspect that there are many readers of this magazine who have further information not only on the specific field phones I have discussed here but also on some other phones and many other relevant aspects of the subject matter. I would love to hear from anyone who has such information or any comments.

As usual, my good friend, Rich Bonkowski, W3HWJ, read the earlier version of the manuscript offered valuable information and advice. He moreover served as a copy editor for me.

Endnote:

6. RKK Radio Museum, Moscow, http://www.rkkmuseum.ru/collections/telephones/telephones_e.shtml

7. en.wikipedia.org/wiki/vietnam_war_crimes_working_group



Fig. 27 *Phonetic alphabet plate affixed to German phone*

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8. Darius Rejali, *Torture and Democracy*, Princeton University Press, 2007, See esp. Ch.8. I am grateful to Rich Bonkowski, W3HWJ, for bringing this publication to my attention.)
9. <http://www.usmilitariaforum.com/forums/index.php?/topic/33700-wwii-field-telephones-us-vs-german/>

June Board Meeting Minutes

The June Board Meeting was held at the Menlo Park 'Round Table Pizza Parlor, commencing at 7:35 on June 18th, 2014. In attendance were Kristen McIntyre, K6WX (President), Marty Wayne, W6NEV (V.P.), Ron Chester, W6AZ (Treasurer), Larry Rebarchik N6DB (Dir.), Byron Beck, N6OUB (Dir.), and non-Board Members, Gerry Tucker, N6NV (Property Master), Vic Black, AB6SO (Membership), Rick Melrose (Chaplain), and Doug Teter, KG6LWE (Field Day Coordinator).

President's Report: Kristen, K6WX reported on an E-mail from our Webmaster John, K6MM, explaining our missing speaker at the June meeting. John relayed word from his friend Rob, K6RB, one of our speakers, that he and Rusty, W6OAT, and Kevin, K6TD, who were all coming to talk about their experiences on the 2013 C82DX DXpedition to Xai Xai, Mozambique, Africa, had never really decided who was "in charge" of the talk, and had simply forgotten about the meeting. Kevin had remembered at the last minute and came to the meeting, but wasn't prepared to give a talk all by himself. Mystery solved! The Board thanked Kristen for her very interesting impromptu fill-in talk on radiation. Nice Save!

Kristen also reported on many comments she has received lately from club members and visitors to our meetings. Overwhelmingly, our unique meeting format and style, as well as the other things like PAARATrips are appreciated and enjoyed. Evidently the way we make visitors, especially new hams, feel welcome does indeed make us "The Friendliest Club Around."

Kristen also reported that she is in possession of a "stash" of Motorola MaxTrac radios, both handhelds and mobiles, which were generously donated to the club by a co-worker at Apple. These radios can be reprogrammed to work on 2 Meters. A discussion of possible ways to get these into the hands of Hams followed. Suggestions ranged from including them

as raffle prizes to lending them to new Hams who have joined the Club.

Vice President's Report: Marty, W6NEV commented that he had been in contact with our June speakers, and that the talk would be rescheduled. He also reported that he has a full roster of interesting speakers lined for the rest of the year. The board thanked Marty heartily for his efforts.

Marty reminded us that the July General Meeting was moved from the first Friday (the 4th) to the Second Friday (the 11th) so as not to conflict with the holiday. He has Don Anastasia, AA6W lined up for a talk on "What's new in Amateur Radio," for the July meeting.

While on the subject of meeting dates, the Board agreed NOT to change the date of the October meeting away from CQP (California QSO Party), as had been previously suggested. It will remain the first Friday of the month, the 3rd, despite the commencement of CQP that weekend.

Marty also reported that preparations for the Special Event station PAARA will be running again this year at Pacificon are practically complete. Marty has assembled equipment and personnel to run 4 HF transmitters in a large tent in the parking lot, in anticipation of accommodating the throngs of attendees wishing to get on the air, too many of whom were turned away last year. The Board again commended Marty for his hard work on yet another great PAARA contribution to Amateur Radio in the Bay Area.

There was no Formal Secretary's report, as Jim KI6KVW was away, and unable to attend. Doug, KG6LWE reported in his stead, that the membership stands at 150 for 2014, with two members paid through 2015, for a total of 152 members. So far there have been 42 renewals via PayPal on the Club website.

Treasurer's Report: Ron, W6AZ, reported that the Club continues to be in good shape financially. 2014 Field Day T-shirt sales were very successful, due to pre-ordering (Thanks again to Marty). Ron reminded us all that the inventory of unsold 2012 record-setting Field Day T-shirts, Club shirts and hats remains unexpectedly large. Ron also reported that raffle ticket sales were down a little at the last meeting, probably due to a somewhat smaller than usual attendance, but that the raffle is doing well for the year. Thanks were expressed to Jim, K6AK for all his work to make the raffle a continuing success.

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(President —Continued from page 1)

key, and we were off to the races at CW-A. Of course, with everything seeming so prepared, Murphy's Law had to insert itself. On Phone-A, only 5 Qs in, Rebar, N6DB's K3 just shut down, and we were off the air on that important 20m station. Yikes! We started looking around for another rig we could use. Gerry, N6NV, went for his pair of TS-930s's, I offered my K2, but we ultimately borrowed Joel's K3 from the 6m station. Rebar's K3 was reset a few times and it was finally determined that there was some thermal problem that caused it to shut down. Since there wasn't a lot of action on 6m, we used Rebar's rig on 6m for the rest of the contest. Phone-A also had another problem at around 2100J when it seemed to shut down again! I went in to diagnose, and we found that the ground lead from the power supply had come loose. Thank goodness it was something simple.

Beyond these failures, we also had a noisy ethernet switch invading VHF, which Joel, KD6W, tracked down after a bit of hunting. He also had his rotator mount slip, causing the pointing direction to be off. We missed a few satellite contacts because of these things, but with all of that fixed, we made several satellite Qs for our extra points. 6 meters was reported to be pretty bad, but there were a few contacts with the locals. Monday was the day that 6 opened up, though. Oh well, so it goes.

The other bands were just great, though. I saw 20m just cranking out the Qs, as always, and I had the best experience I've had at FD on 40m and 15m. 40m produced steadily all night long, with a nice solid set of pileups from about 0100J to 0130J. It was never boring. I was still able to work stations at 0700J when I was pondering a band switch. Usually I'm out of contacts by then, and doing a little search and pounce. Once I switched to 15m, it was great. The new 15m monobander made all the difference. I started with the US Virgin Islands, and it just went on from there. It was a little weak, and then just built and built, until it was solid pileups until I turned the station over at 0930J to Steve, W1SRD. Fantastic fun.

If you missed Field Day with PAARA this year, I hope you'll mark your calendars for next year to join us at Bedwell Bayfront Park. It's the best FD you can find around, in my opinion. Thank you to everyone who helped with setup, teardown, support, and operating. Don't forget we have a great program in July, and many more activities throughout the year.

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(Minutes — Continued from page 7)

Under Old Business, the Board reviewed the results of a survey of the sellers at the most recent Electronics Flea Market, taken by Darryl, KI6LDM. When asked if they would be interested in selling at an October Flea Market, if one was to be held. Out of the 90 Vendors Darryl was able to ask, 75 (83%) responded that they would come; 11 (12%) responded that they would not; 4 (4%) said that they would be selling at Pacificon instead.

The Board wishes to thank Darryl, who was unable to attend this meeting, for his initiative in taking this survey. An informal discussion of the possibility of PAARA sponsoring the October Flea Market ensued. Most of the board felt that the idea had merit, although no formal motions were made.

Doug, KG6LWE reported that the open Captain positions of GOTA, and Network Captain have been filled. Thanks to Jake, K6MP for stepping up to be GOTA Captain, and to Daniel, KJ6SEE for volunteering as Network Captain. Doug informed the Board that the final Field Day preparation gathering, "Network Day" had gone well, and that the logging computers are all ready to go. He also reported that the reservation with the City of Menlo Park for the use of Bedwell Bayfront Park for Field Day had been submitted, and approved.

The Board wishes to express it's gratitude to The City for its continued support of PAARA's Field Day.

Doug confirmed the reservations of the U-Haul trucks and "portable facilities," for the event, and expressed his thanks to the many members who have contributed so much time and effort to the preparation of another successful PAARA Field day.

The board encourages all interested parties, hams and non-hams alike to visit the site, and reminds everyone that Field Day is June 28th and 29th this year.

Under New Business, the Board discussed the E-mail from one member suggesting changes to the format of our General Meetings. It was unanimously agreed that the way PAARA's General meetings are run is indeed different from many other clubs, but that difference is a positive one that sets PAARA apart from other clubs. The Board hopes it echoes the sentiments of the Membership on this subject, but encourages comments and suggestions of all kinds from the membership. This is your Club.

Despite covering so much ground, the meeting was adjourned a little earlier than usual at 8:43.

Doug Teter, KG6LWE, Stand in for Jim KI6KVW

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VE Exams

3rd Saturday each month, 10:30AM, 145.23- PL=100Hz
 Redwood City Main Library, Community Conference Room
 1044 Middlefield Road, Redwood City, CA
 Contact: <http://amateur-radio.org> or Al, WB6IMX@att.net

Electronics Flea Market

Sponsorship by A.S.V.A.R.O. — Association of Silicon Valley Amateur Radio Organizations
 Second Saturday of month, March-October, 6am-2pm
 Howard M. Krawetz, N6HM 650-856-9761
 Contact: <http://www.electronicfleamarket.com/>

PAARA — Palo Alto Amateur Radio Association

Meets 1st Friday 7:00pm each month at Room H-6, Cubberley Community Center; Net 145.230 - PL 100Hz Mondays at 8:30. See our website at <http://www.paara.org> for more information or contact: Joel Wilhite KD6W, KD6W@ARRL.NET, 650-325-8239

FARS — Foothills Amateur Radio Society

Meets 4th Friday each month at 7:30pm
 Contact: <http://www.fars.k6va.org>

NCDXC — Northern California DX Club

Meets 3rd Thursday 7:30pm each month,
 Repeater for member info 147.360, Thursday 8:00PM
 Contact: <http://ncdxc.org> or Mike Gavin W6WZ, (650) 851 8699

QCWA Chapter 11

Northern California Quarter Century Wireless Association

Meets third Wednesday monthly at Harry's Hofbrau in Redwood City @ 11:30 AM.
 Guests are welcome. Saturday morning net on 146.850 MHz, PL 114.8

50 MHz & Up Group

Meets 1st Thursday each month at 7pm in the Texas Instruments Building E conference room in Santa Clara.
 Contact: <http://50MhzandUp.org>

SPECS

Southern Peninsula Emergency Communication System

Meets each Monday 8:00pm on Net 145.27, 440.80 MHz
 Contact: <http://specsnet.org> or Tom Cascone, KF6LWZ, 650-688-0441

SCARES

South County Amateur Radio Emergency Service

Meets 3rd Thursday 7:30pm each month, Belmont EOC, Belmont City Hall, One Twin Pines Lane, Belmont CA 94002. Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings. Contact: President Gary D. Aden, K6GDA 650-743-1265 (D), 650- 595-5590 (N)
 Web: <http://k6mpn.org> E-mail: pres@k6mpn.org

SCCARA

Santa Clara County Amateur Radio Association

Operates W6UU & W6UU/R, repeater 146.985-pl
 Nets: 2m, 7:30pm Mon; 70cm, 442.425+ (pl 107.2) Thur.
 Meets 2nd Mon each month @ 7:30 PM.
 Contact: <http://www.gsl.net/sccara> or Clark Murphy KE6KXO 408-262-9334
 ARRL/VEC license testing contact 408-507-4698

SVECS — Silicon Valley Emergency Communications

Operates AA6BT repeater (146.115 MHz+)
 contact: <http://www.svecs.net> or Lou Stierer WA6QYS 408 241 7999

TEARS — The Elmer Amateur Radio Society

Dedicated to operational training, knowledge building & FCC exam testing.
 KV6R repeater under construction.
 Contact: AA6T@ARRL.NET
 Most members are Extra Class or VE's. See QRZ dot com/kv6r for class info

WVVARA — West Valley Amateur Radio Association

W6PIY six-meter repeater on 52.58MHz. Normally, six-meters is linked with 147 and 223, while 441 and 1286 repeaters are linked.
 VHF: 52.58 (-500) 151.4 ctcss UHF:
 147.39 (+600) 151.4 ctcss 441.35 (+5.0) 88.5 ctcss
 223.96 (+1.6) 156.7 ctcss 1286.20 (-12m) 100.0 ctcss
 Meetings are 3rd Wednesday of every month.
 Contact: <http://wvvara.org>, Bill Ashby N6FFC, 408-267-3118, N6FFC@Juno.com, or N6FFC@ARRL.NET

**American Red Cross,
 Santa Clara Valley Chapter**

Contact: <http://santacalaravalley.redcross.org> or Scott Hensley KB6UOO, (408) 967 7924
fshensley@Novell.com



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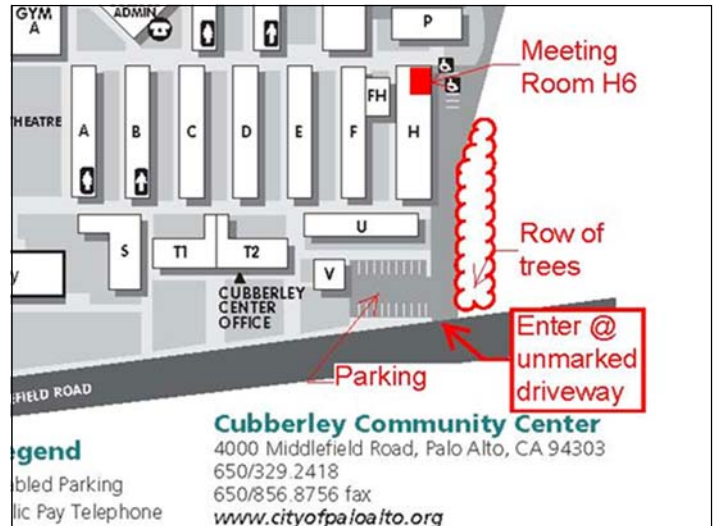
If you would like to
 order a badge, see
Doug Teter, KG6LWE.

PAARA Weekly Radio Net

Info and Swap Session
 every Monday evening at 8:30pm
 on the N6NFI 145.230 MHz repeater

<u>Week</u>	<u>Control Operator</u>
1 st	Joel KD6W
2 nd	Doug - KG6LWE
3 rd	Jack - N1VSL
4 th	Marty - W6NEV
5 th	Rob KC6TYD

If you're interested in trying out at Net Control,
 Contact Doug, KG6LWE. It's good practice,
 and lots o' fun! Give it a try.



**Meeting Location — Middlefield Road
 between San Antonio and Charleston in Palo
 Alto. 4000 Middlefield Road**

<http://www.foto.mail.ru/list/shkurkin>

Vladimir Vladimirovich

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**Palo Alto Amateur Radio Association
 P.O. Box 911, Menlo Park
 California 94026-0911**

Club meetings are on the first Friday of each month,
 7:00pm at the Room H-6, Cubberley Community Center.



Radio NET & Swap Session every Monday evening, at
 8:30pm, on the 145.230 –600 MHz repeater, PL 100Hz.

Membership in PAARA is \$20.00 per calendar year,
 which includes one subscription to PAARAgaphs
 \$6 for each additional family member (no newsletter).

Make payment to the
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 P.O. Box 911, Menlo Park, CA 94026-0911

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<p>RADIO IN THE PARK</p> <p>9:30am - 12:30pm Sundays, 7/13, 8/3, 9/7</p> <p>QTH: Agnews Historic Park 4030 Lafayette St. Santa Clara, CA 95050</p> <p>N 37° 23.549 W 121° 57.297</p>	<p>Ilse Beck, E. A. , KI6IBM</p> <p>Beck Business Services</p> <p>441 N. Central Avenue, #9 Campbell, CA 95008</p> <p>Enrolled Agent Income Tax Bookkeeping/Payroll Elder Care Consultations Billing and A/R</p> <p>Phone/FAX: 408-267-8234 Email: ilsebeck@jps.net</p>
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