

K6YQT

PAARA NEWSLETTER
VOLUME 51 NUMBER 5 May 2002

W6OTX

PAARAgraphs



Celebrating 65 years as an active ham radio club—Since 1937
Newsletter for the Palo Alto Amateur Radio Association, Inc.



CALENDAR

- May.....3, **PAARA Meeting, 7:30**
Menlo Park Recreation Center
700 Alma Street, Menlo Park
- May.....8, **PAARA Board Meeting, 7:30**
Red Cross Bld., 400 Mitchell Ln., Palo Alto
- June.....7, **PAARA Meeting, 7:30**
- June.....12, **PAARA Board Meeting, 7:30**
- July.....12*, **PAARA Meeting, 7:30**
**July meetings delayed one week due to July 4th*
- Holiday*
- July.....17*, **PAARA Board Meeting, 7:30**
The ARRL has a code practice:
URL <http://www.pcpractice.com/CW/>
-Don KF6JMQ

PROGRAM

May 3, 2002 7:30 P.M.

*The talk was on
contesting*

Speaker:

(Program unknown at press time)

Join us for pre-meeting eyeball
at Su Hong Restaurant , 1039 El Camino Real, Menlo Park
Food will be served at 6:00 sharp, so guests will be on time for the PAARA
meeting. Those arriving late will be responsible for their own order and bill.

—PAARA Radio NET every Monday evening at 8:30 P.M., local time—
on the 145.230 -600 MHz repeater, PL tone off



My introduction to WSJT

John Geiger, NEØP

In August 2001 my wife and I moved from Davenport, IA to Lawton, OK. Moving is a chore for anyone, but for Hams it is especially difficult and time consuming. Having to take down and reinstall antennas, setting up a new shack, and getting used to new propagation all add to the difficulty. Our move seemed to be one challenge after another, but within three weeks, I had all of my antennas up and was ready to start tearing up the airwaves.

My first big operating event from the new QTH would be the September VHF contest, which would occur less than a week after getting the 2-meter Yagi up. I was excited to see what VHF activity would be like in the southwest. I would also have to start on my grid chase for VUCC all over again, and knew that in Oklahoma I would not be able to rely on aurora for some long distance contacts as I had in Iowa. Fortunately, I discovered something else that is a worthy replacement - high speed meteor scatter.

From the QTH in Iowa I had made a handful of meteor scatter contacts on 6 Meters, and had been thinking about getting into high speed CW ever since I purchased a RIGblaster in July of 2001 (best \$50 I ever spent, but that is another story). At the same time I kept seeing postings on the Internet about WSJT mode, but knew nothing about it. Something happened to me while waiting for the VHF contest, and I felt drawn to learn more about this WSJT thing that everyone was raving about. I learned that WSJT is actually a program, which uses high speed four tone RTTY. The mode is technically FSK441, but almost everyone refers to it as WSJT. I had the Thursday afternoon before the contest off from work, so I downloaded the WSJT software and manual, and started my excursion into high speed RTTY. The best thing is that the software is free, just visit <http://pulsar.princeton.edu/~joe/k1jt> to download it.

After installing the software, it was time to test it out. Fortunately it is very simple to learn, and I felt ready to arrange WSJT skeds for the contest. A call over the Internet yielded a sked with Shelby, W8WN at the start of the con-

(Continued on page 42) introduction to WSJT

Miscellaneous Dates

ELECTRONIC FLEA MARKET @ Foothill College

Perham Foundation Sponsorship 408/734-4453, 408/736-2685 fax

Second Saturday of month, March-October, 6 AM-2PM

May 11, SPECS
June 8 FARS
July 13 SVECS
Aug 10 WVARA
Sept 14 PA Chapter, American Red Cross
Oct 12 PAARA

PAARA Palo Alto Amateur Radio Association

meets 1st Friday 7:30 each month, Net 145.230 each Monday 8:30,

contact: Andreas Junge N6NU.....(650) 233 0843

FARS Foothills Amateur Radio Society

meets 4th Friday 7:30 each month,

contact: Sheldon Edelman N6RD, 650 493 7212, n6rd@earthlink.net

NCDXC Northern California DX Club

meets 2nd Friday 7:30 each month, repeater for member info 147.360, Thur 8:00PM,

contact: Bob Mammarella KB6FEC 408 729 1544.

NorCalQRP Northern California QRP Club

meets 1st Sunday each month,

contact: Jim Cates 3241 Eastwood Rd., Sacramento, CA 95821.

Perham Foundation,

contact: (408) 734 4453,

SPECS Southern Peninsula Emergency Communication System

meets each Monday 8:00PM on Net 145.27, 440.80 MHz, www.specsnet.org

contact: Tom Cascone, KF6LWZ, 650-688-0441 .specs@sypal.org

SCARES South County Amateur Radio Emergency Service

meets 3rd Thursday 7:30 each month, San Carlos City Hall.

Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings.

contact:

SCCARA Santa Clara County Amateur Radio Association

Operates W6UU repeater 146.385+ Nets: 2m, W6UU, 7:30 Mon; 10m, 28.385, 8:00 Thur. meets 2nd Mon each month.

contact: Jack Ruckman AC6FU

SVECS Silicon Valley Emergency Communications

Operates WB6ADZ repeater (146.115 MHz+)

contact: Lou Stierer WA6QYS 408 241 7999

WVARA West Valley Amateur Radio Association

operates W6PIY repeater 147.39+, 223.96, 441.875, 1286.2

meets 3rd Wed every month.

contact: Glen Lokke Jr. KE6NBO at 408 971 8626, or glokke@pachell.net

Disaster Services,

PALO ALTO CHAPTER, American Red Cross, www.paarc.org

400 Mitchell Lane

Meets 3rd Wed. each month 7:30PM,

HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite.

contact: Mae Millian 650-688-0423. MACM@paarc.org

SAN JOSE CHAPTER, American Red Cross

contact: Scott Hensley KB6UOO, (408) 967 7924, FSHENSLEY@NOVELL.COM

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: Al WB6IMX@att.net.

Swap meet, LosPositas College, Livermore, 1st Sunday each month.

Contact: Cliff Kibbe (209) 835 6715 or Eliot Ross (925) 606 7710

(please send changes to PAARAgaphs editor: k6uro@arrl.net)

Over the last six years, about 25,000 people have died from acts of terrorism, worldwide.

Over that same period, 52 million people have died from preventable hunger; about 24,000 people per day.

-Jay Melvin, WA6SBO

Want and For Sale ads in

PAARAgaphs

are **FREE** to members

(Submit by e-mail or letter before the 15th of the month)

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Jim Rice, K6AK '03

(see "Calendar" for Board meeting times, visitors welcome)

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Submit material for PAARAgaphs by the 15th

Use WORD, rich text, ascii, .pub, .ps, or .jpg.

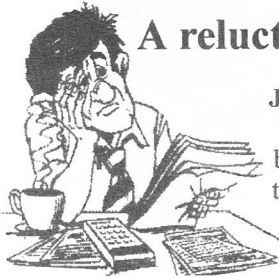
PAARA Website <http://www.qsl.net/paara/>

(Continued from page 41) introduction to WSJT

test. This was going to be exciting! I was finally going to be on High Speed Meteor Scatter (HSMS). I had worked Shelby on 6-meter SSB meteor scatter before from Iowa, but this was really going to be a challenge.

HSMS is mainly used to take advantage of the random meteors that are always striking the earth. Most of these meteors are small, and their burns through the atmosphere are so quick, that they support propagation on 2 Meters for only a fraction of a second. By speeding up the information that is sent, and exchange can be included in this fraction of a second. Now the VHF operator does not have to wait around for a meteor shower to be able to communicate via the rocks. WSJT sends information at a rate of 1800 WPM, so a lot can be sent during a very short ping. All you need is a computer sound card/transceiver interface, like one that is used for PSK or RTTY.

(Continued on page 46) introduction to WSJT



A reluctant Ham gets jazzed

WorldRadio Online 02 09 02

Jessica Littmann, KA1WEB

My nonHam friends were totally baffled when I gleefully announced that I was attending the Dayton Hamvention. Most had never heard of Amateur Radio, and the few who had didn't understand the purpose of the event. "What is it exactly?" they asked. "A conference? A flea market?"

"It's kind of like a Mecca for Hams," I explained. I viewed the event as a way to spend some time with my father, W1OU, who got me into the hobby when I was in eighth grade. Plus, I hoped that a little time at the heart of Hamdom would help rekindle my interest in radio. Since graduating from college and working for a few years, Amateur Radio had slipped down on my list of priorities. Although I still made a point of getting back for Field Day every year, that was really the extent of my involvement.

My impression, as a 25-year-old female who isn't keen on being labeled a YL, was that the hobby was mostly middle-aged men reliving their childhoods by buying all the equipment they couldn't afford to get way back when. Although there certainly were strong elements of nostalgia at the Hamvention, I found plenty of encouraging evidence - including enthusiastic presentations by young amateurs, accounts of exotic DXpeditions, and the buzzing convention floor, that the hobby is thriving among Hams of all ages with diverse interests.

The festivities begin

My dad and I arrived in Dayton on 18 May 2001, after meeting up in Chicago. The hotel was swarming with Hams - Hams with radios strapped to every appendage, Hams with t-shirts and hats emblazoned with their call signs, and Hams with antennas protruding from the backs of their cars. When we went in to the hotel restaurant, we were amused to see that almost all of the diners had HTs propped against their menus. Our first night at the convention, we attended the Collins Collectors Association dinner. I was among a small minority of women at the presentation, and one of the few participants who wasn't even alive when Collins equipment was in its heyday. To me, collecting Collins radios was about preserving history - but to many of the other participants, it was much more personal than that. Ronald Steinberg, W9RVR, reminisced about the first Collins radio he'd ever owned, a KWM1 that he'd bought in the 1950s. "Now, if only I had my 1957 Chevy back to go with it." sighed.

A video presentation of the Hammond Radio Museum in Guelph, Ontario, underscored the theme of radio as living history. Fred Hammond, VE3HC, now a silent key, was shown in the video escorting Floyd Soo, W8RO, around an immense collection of vintage radios and radiorelated paraphernalia. While the speeches and videos were all interesting, they left me with the feeling that for many amateurs,

radio is more about preserving the past than growing into the future.

Hamvention "snowballs" into a global event

We hit the Hamvention floor early the next day. Although I knew that Hamvention was the largest gathering of Amateur Radio operators in the world, I was still unprepared for the scope of the event - it was larger and much more vital than I anticipated.

The first Hamvention in 1951 included only 13 vendors, according to Hamvention organizer Steven Schoemann, N8NRE, of Dayton, Ohio. "It just kept growing and growing, and snowballed into what you see here now." Schoemann said. A cadre of volunteers starts preparing for the event two weeks before as an estimated 28,000 visitors from every continent descend on the convention center.

Unlike other conventions I've attended, where slick signs, giveaway trinkets, and "booth babes" are the order of the day, Hamvention was marked by scores of lowbudget signs, and knowledgeable people who actually produce and use the wares they're selling. At every table I passed, I saw amateurs engaged in earnest conversation with each other.

For Bill White, W8IKF, attending the 50th anniversary of Hamvention was a trip down memory lane. White, who has been operating since 1951, attended the first Hamvention at the downtown Dayton Biltmore. "It's sure grown since then," he said. For White, radio was a great hobby "years ago, when I made my own stuff. Back then we built our own transmitters and receivers - now it's all readymade," he said wistfully.

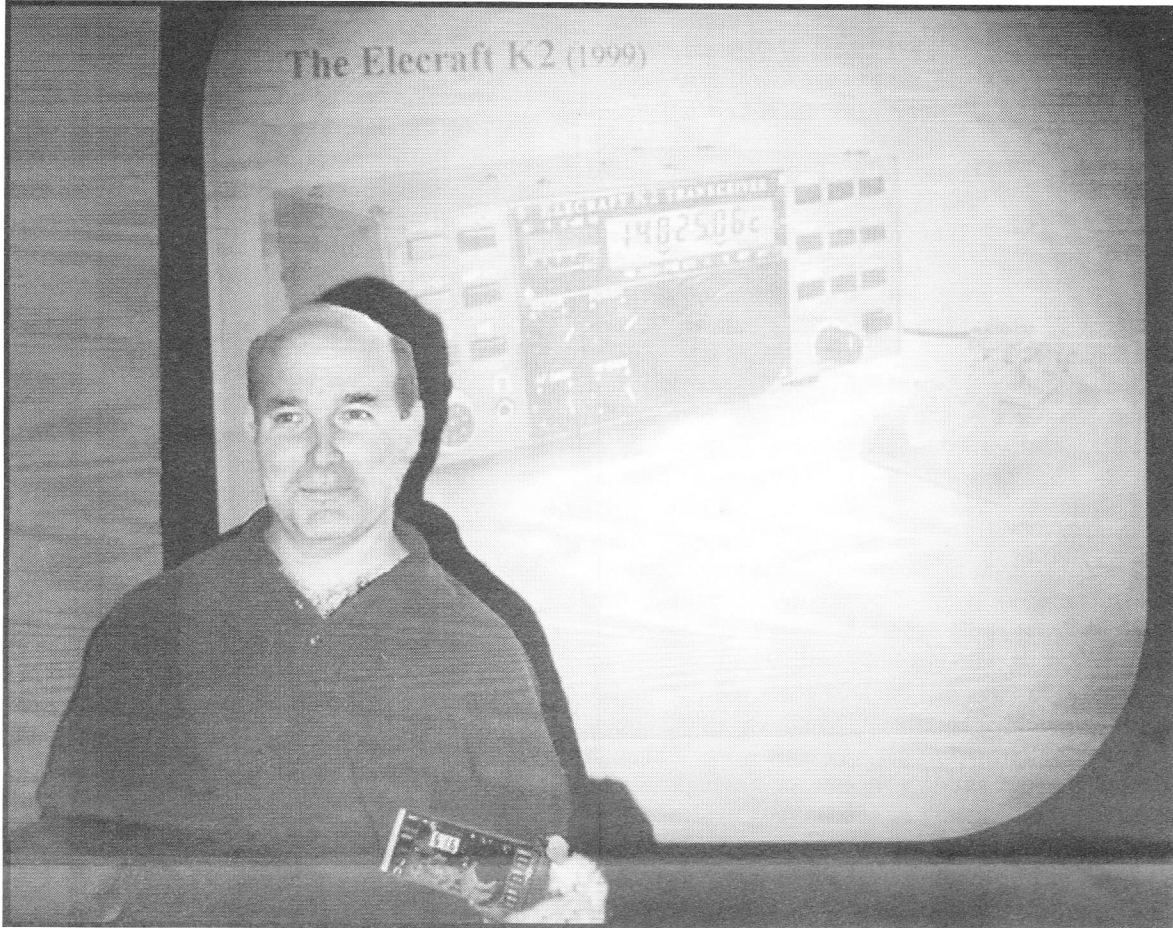
There were, however, signs of a renaissance in homemade equipment - most notably, the Elecraft <www.elecraft.com> table, where attendees crowded around the table for information on building radio equipment from kits. As I looked at the kits, I remembered how my dad and I had built an MFJ receiver years ago. Seeing where the parts went and soldering them in place helped me translate the squiggles on a schematic into a working knowledge of how the radio actually functioned.

Kids take reins of Amateur Radio

One of the highlights of Hamvention was a forum on getting kids involved with Amateur Radio, moderated by Carole Perry, WB2MGP, of Staten Island, New York. Perry is one of the few educators in the U.S. to successfully integrate Amateur Radio into a gradeschool curriculum. Because Amateur Radio requires knowledge in different subject areas - including geography, history, science, math, and language arts, the hobby makes an ideal component of a gradeschool curriculum, Perry said.

Not all the young Hams at the event were fortunate enough to have time dedicated to their hobby in school, however. "School has slowed me down a bit." conceded Manhattanite Zane Wruble, W2YL, who earned her Extra Class license in February of 1999. An avid contester, Wruble cited "earning awards" as her favorite aspect of the hobby. The 12 yearold has already garnered kudos in the form of a DXCC award, and is progressing toward working

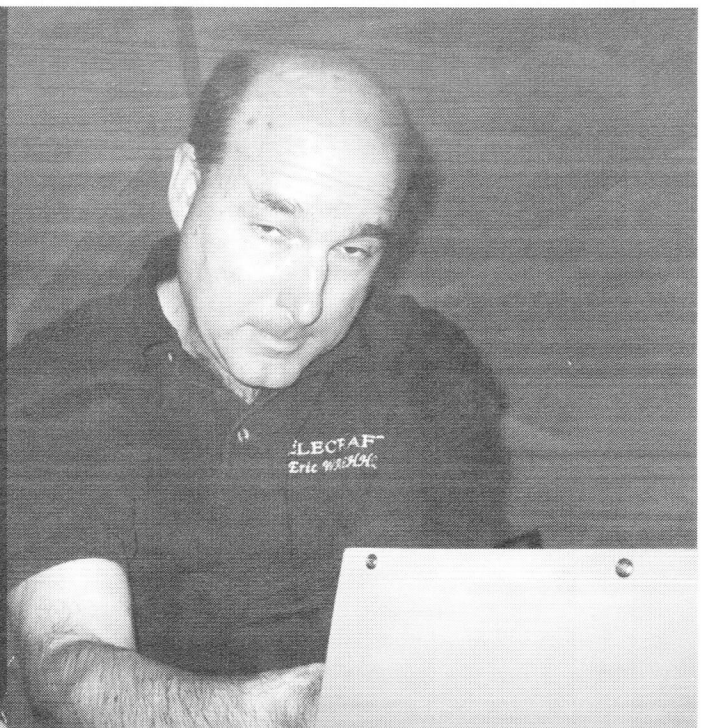
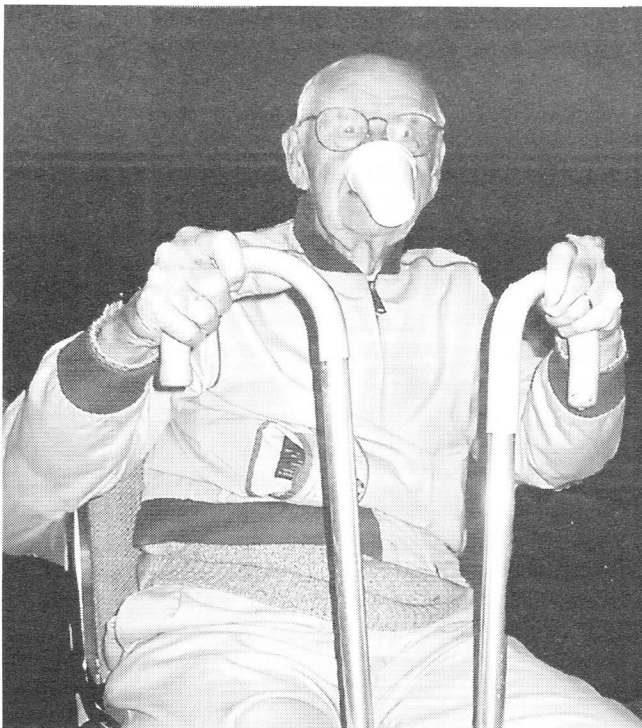
(Continued on page 46, *reluctant Ham*)



Art Vadar

Eric K-2

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Gerry N6NV and Bob KD6KYT

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(Continued from page 43, reluctant Ham)
 every county in the U.S.

Another young Ham, Jonathan Troup, KØDE, of Longmount, Colorado, emphasized the opportunities that Ham radio offers for mentoring. Troup, 13, serves as an Elmer for several other 7-10-year olds in the Boulder Amateur Radio Club (BARC) who are working to attain their licenses. Although some adults might think the idea of kids teaching kids is a bit risky, Troup pointed out that most kids appreciate the opportunity to work with a peer to get their licenses - it makes the hobby seem cool.

Fellow BARC Junior member Kristin Wilson, KCØINX, described the popular "Fourteener" event, in which Hams brave thunderstorms and rocky terrain on a predawn hike to the top of 14,000 foot Boulderarea peaks in order to log as many QSOs as possible. Wilson, whose mother, siblings, and grandparents are amateurs, described herself as belonging to "a family of pigs - I mean, Hams!" Her humorous presentation underscored Perry's message: Successful young Hams have in common a network of friends and family to encourage them with the hobby.

Farther afield, potential Hams get hooked on the hobby in other ways. Foxhunting, or radio directional finding, is one of the more popular ways to get kids involved with radio in China, according to Han Zhaofeng, Deputy Secretary of the Chinese Radio Sports Association (CRSA) in China. "It's part sports and part education." Zhaofeng said, adding that children are able to take classes in radio directional finding as one of their technology courses. Students build their own receivers and learn the principles of ARDF. "It is our hope that Amateur Radio will become part of education in the future. ARDF is how we get people involved." said Zhaofeng.

I was surprised to learn foxhunting is becoming a booming hobby in the U.S. In one forum, veteran foxhunters Bob Frey, WA6EZV, and Dick Arvelt, WB4SUV, explained some novel techniques for this specialty hobby. The two participated in ARDF world championships in Nanjing, China, which included 350 competitors from 26 different countries.

They're not the only ones who are world travelers. We also stopped in on the DX Forum on Saturday, and had the pleasure of listening to Garry Shapiro, N16T, and Tom Harrell, N4XP, describe their sometimesharrowing DXpedition to Kingman Reef. While visiting a desolate stretch of reef suspended in sharkinfested waters, the team learned a valuable lesson: Beware of sea urchins when bringing inflatable boats loaded with equipment to shore. Their description of combining adventuring with radio communication was inspiring enough to get an armchair traveler like me excited.

Our last stop was the sprawling outdoor flea market, where we saw everything from vintage radios housed in Gothic cabinets to mountains of spare parts. My dad and I were among the minority of conferencegoers who flew, rather than driving, to Dayton - a fact that irritated my dad when we really started trawling the market. "Do you think I

could fit that generator in the overhead compartment?" he asked, pointing at a monstrous contraption that must have weighed over 400 pounds. He finally contented himself by buying some parts and a PSK 31 interface. I settled for a name tag with my call sign on it - and a resolve to get more involved with ham radio this year, so I can enjoy next year's Hamvention even more .

(Continued from page 42) introduction to WSJT

Contest day arrived, and the sked was underway. I got a couple of nice pings from Shelby, and got both my call and his call being sent, but not enough for a completed contact. It was very thrilling to hear his signal burst out from an otherwise dead band for a second or two. This was not bad for 1 p.m. in the afternoon on 2 Meters. The distance between us was approximately 750 miles. During the contest I discovered the "Ping Jockey" page where skeds are made daily between stations using HSMS <www.pingjockey.net> . I did make one WSJT contact during the contest with W7FG, but it was on tropo.

The Monday night after the contest I once again tried with W8WN, and completed!! A 750-mile QSO on 2 Meters during a routine Monday night - not a bad deal. One problem that came up during my QSO with Shelby was that I did not know the transmitting sequences well enough. It is very important to know what to send based on what you have received from the other station. This tells the other station what you have picked up, and what they still need to send. The Ping Jockey page does a great job explaining these sequences. Make sure you know them before attempting HSMS!

On Thursday of that week I completed a QSO with John, KØPW in EN34, also at a distance of around 750 miles. Later in the week I had HSMS QSOs with KØAZ in EM27 (both 6 and 2 Meters), N5OSK in EM25, and W8PAT in EN81, which is over 900 miles from my QTH. The next couple of weeks brought more WSJT contacts, and on the morning of 22 September I completed with N8OC in Michigan, and a distance of just under 1,000 miles. I knew that I had found a valuable mode for collecting grids on 2 Meters, and unlike aurora, this mode was almost always accessible. It did not require some special solar event. Also, the weather does not play a role as it does in tropo. Random meteors are almost always available.

In the first month that I was on WSJT I worked 11 states on 2 Meters, ranging from Colorado and Arizona, to Florida and Georgia, to Michigan and Ohio. I also learned some valuable information about HSMS, mainly:

1. A large station is not required. I am running an Icom 746 barefoot, which puts out 100 watts. My antenna is a Cushcraft A148-10S, which has 10 elements on a 12 foot boom. It is only mounted on the roof of my house, at about 22 feet. I do hope to raise it up higher in the near future.

2. Meteor scatter contacts can take a long time. Most of these QSOs took around 30 minutes to complete, and 2 took almost an hour. However, I would not have been able to

(Continued on page 47) introduction to WSJT

(Continued from page 46) introduction to WSJT

make these contacts any other way, and the time is worth it for a new state on 2 Meters.

3. Meteor scatter works almost any time of day. Most of these contacts were made in the evening, and a couple were in the afternoon. Meteors may be better in the morning, but MS contacts are not limited to that time.

4. Most importantly, HSMS is a lot of fun. Discovering WSJT has greatly added to my station capabilities on the VHF bands. If you have a computer, a VHF rig, and some patience, I urge you to give it a try also. You will be surprised with what you can work anytime of day on 2 Meters. It is still a thrill to hear a signal burst through the quiet band for a fraction of a second, and then to see your call sign come up on the computer screen from that burst.

I hope this story helps to demonstrate how easy and fun it is to get on WSJT mode. By the time you read this, the Leonids Meteor shower/storm should be over, and hopefully a few more VHF'ers will have had their introduction to meteor scatter during that shower. Come and join us on HSMS using WSJT!!

Board of Directors



2002 April 10, Red Cross Building
PAARA Board of Directors Meeting.

Quorum was met with Jerry N6NV, Rolf N6NFI, Vic AB6SO, Jim K6AK, Bob KD6KYT, Wally K6URO, Andreas N6NU and myself, Jay WA6SBO.

Discussion continued from the previous Friday's general club meeting about the utility of another trailer/mobile shack for Field Day and emergency communications. A motion was carried for Bob to buy one he knows of for \$250. The Trailer has been purchased (& photo is attached w/ Bob & Jerry).

Another motion was carried that Bob acquire professional tax preparation help.

Discussion about the requisite features of the planned 1.2 GHz repeater produced an extensive list for future evaluation; club members should suggest to the Board any special or particular requirements they can envision.

Another motion was carried allocating up to \$200 for evaluation of repeater site coverage.

Discussion about future tours produced some suggestions again, club members should make known any ideas.

73, - Jay, WA6SBO

Join us for pre-meeting eyeball

QSO May 3rd

gab & gobble

Food will be served at 6:00 sharp, so guests will be on time for the PAARA meeting. Those arriving late will be responsible for their own order and bill.

6 pm— at Su Hong Restaurant
1039 El Camino Real
Menlo Park
—across from Kepler's Book Store—

PAARA Radio NET

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(short personal ads remain free for members in good standing).

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1. Not for profit ads by association members for ham-related items and wants. No cost for business card size ads (additional space at \$2.50 per business card size).
2. For Profit organizations and/or individuals: \$5-business card size, \$25-half page, \$50 full page or back cover.

These fees may be reduced or waived in exchange for a valuable consideration that is given to the Association or its general membership. Such consideration must be in addition to any existing arrangements with the association.

The PAARAgaphs editors reserve the right to reject any ad deemed to be not in the best interest of the Association. All fees payable in advance by the year with "scanner-ready" copy or text-only ads. Give payment and copy to Bob Korte

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

- Club meetings are on the first Friday of each month, 7:30pm at the Menlo Park Recreation Center, 700 Alma Street, Menlo Park, CA.
- Radio NET every Monday evening, at 8:30pm, on the 145.230-600 MHz repeater, PL tone off.

Membership in PAARA is \$12.00 per calendar year which includes a subscription to PAARAgaphs, \$6 for additional family members (no newsletter).
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