



ARA *Newsletter*



Vol.XV No.5

May 1999

The Journal of The Amateur Radio Association of Southwest Florida

Club Information

Meeting Time:

4th Tuesday at 7:30 pm at The
Shepherd of the Glades Church
Rattlesnake Hammock Road, Naples

Club Repeater:

K4YHB – 146.670 MHz (-600)

Club Packet Cluster Node:

N1DL – 145.070 MHz

Club Chat Node:

CHAT – 144.970 MHz

Club Home Page:

<http://naplesfl.net/~araswf> or
<http://naples.net/clubs/amradio>

Club Officers:

President – AD4TR – Martin

e-mail – ad4tr@aol.com

Vice President – KE4JZT – A.D.

e-mail – ke4jzt@aol.com

Secretary/Treasurer – KD4VRZ – Gary

e-mail – kd4vrz@arrl.net

Past President – KE4RGH – Bill

e-mail – ke4rgh@mediaone.net

Repeater Trustee – WB2QLP – Jordan

e-mail – wb2qlp@aol.com

Club Chat Node – N4VMT – Phil

e-mail – n4vmt@aol.com

DX Packet Cluster Node – KD4VRZ

Newsletter Editor – K2ZEL – Bill

e-mail – nfn06232@naples.net

Training Committee – AD4TR

May Meeting

Field is next month thus the meeting discussion will work on the planning for this annual outing. KE4RGH will be demonstrating the logging software that we will be using during the field day. This software is an updated version of the software that has been used in the past. All members planning to participate on the weekend festivities should see this demonstration. If you need logging software for your home station this program is recommended for your evaluation. The meeting will offer you some time to examine it and to ask questions on the usability in your personal station.

The rest of the meeting will be devoted to the plans for the different transmitter/receiver setups and getting people signed up for the setting up of the site of Friday before the event and securing the group of participants to assist in the tear down and cleanup. For the past two years N4VMT has generously offered us the uses of his location for our club to operate. On another page in this issue is a map showing Phil's location. Looking forward to seeing all of you at the Field Day Operations

President's Column

With the temperature and the humidity on the rise I can tell May is here. Our snowbird ham friends are packing up and heading north for a better climate. May is the time of year we need to start making plans for field day and the upcoming hurricane season. Do you have emergency antennas, emergency power, Window shutters and all the other hurricane supplies necessary to survive the storm. Dr. Grey is forecasting an active hurricane season and keeps reminding us that Florida is way over due for a major storm. Lets hope he is wrong but we need to be ready for emergency communication and to protect our property and families. I have seen the devastation of Hurricane Andrew first hand and believe me you can't over prepare.

June 26th and 27th is field day. We will start setting up at Phil's N4VMT place Friday afternoon. Please mark your calendars. Each year our club has added to and improved our operation. We need set up, loggers, operators, food eaters and rag chewers. Bob WA8QYJ once told me this is the time that all good hams come to the aid of their hobby. I am sure with a little cooperation from the weather and propagation we will beat last years effort of 2000 qso's. I will see y'all there.

7 3 M a r t i n A D 4 T R

From The Vice President

I hope all that went to the Dayton Hamfest had a great time. Maybe some day I will get to go, that would be nice. I'm sure all will let know about all the "STUFF" they saw and bought and wanted to buy !

Summer is here and so is all the thunder and lighting. Lighting is a hams worst nightmare , so remember to unplug all your coax cables when not in use and sleep at ease or at least I do. I hate to wake up in the middle of the night hearing thunder and ask myself , Did I unplug everything? With that in mind, Hurricane Season will be here soon , so start thinking about what you can do to be prepared , for the worst. Hopefully we will be lucky again and not see any storms come are way this year.

So 73 for now and see you all at "FIELD DAY". KE4JZT A.D.

Secretary's Comment

The report this month is very short as I am traveling. We are still solvent and a complete report will be given at the meeting. Plan to be there on Field Day. We need a lot of operators and support as we try to better last year's score. De Gary – KD4VRZ

Field Day is Coming! See you at Phil's

RACES ? EOC

The 1999 Atlantic hurricane season officially starts June 1, and runs through the end of November. Forecasters are expecting a busy season, at least as active as 1998. Dr. Bill Gray at Colorado State University is predicting 14 named storms, 9 hurricanes and 4 major storms this season throughout the Atlantic, Gulf and Caribbean. That's about 40 percent higher than the long term average, and twice as many major storms as an average year. Check your supplies, and be prepared early. With La Nina beginning to possibly weaken in the Pacific, forecasters say an early season storm is possible, and that usually means trouble for the Gulf coast. For a look at all of the world's tropical weather basins see the EM Tropical page at <http://www.collierem.org/ccemtrop.htm>.

ARES/RACES FORUM AT GOVERNOR'S HURRICANE CONFERENCE

The 12th annual Florida Governor's Hurricane conference will be held at the Tampa Convention Center June 7-11. This year's amateur radio training session is scheduled for 8:30 AM to noon, Tuesday June 8, in room 16 of the center. There is no admission charge for hams who will be attending ONLY that session. If you are planning to attend other training sessions or the conference itself, regular fees apply! The agenda for the session includes reviews of emergency operations statewide in the past year, and discussion of ways to

improve communications and amateur operations. There will also be an open discussion of amateur radio's future involvement in emergency communications, given new technologies that are available.

Some Collier County hams have already expressed an interest in attending, and may be able to help with transportation. Check in on the Tuesday night nets for more information.

JUNE ARES/RACES MEETING POSTPONED ONE WEEK

Due to the Governor's conference and travel requirements, the ARES/RACES meeting normally scheduled for June 8 in the EOC will be held on June 15, at 7 PM. Please make a note on your calendars. If you can't attend the session in Tampa, we'll have a full report on the

Dinner Meeting

The Dinner meeting was held on Wednesday May 5. at the Pacific 41 Restaurant. There were 20 people present, All had a good time.

Conversations about Computer and Viruses were talked about, Band conditions were also discussed. The new and unwanted PL on the Repeater fostered some bad remarks about it. Jokes were told, and many more interesting things came up. The dinner was excellent again, and everyone had a good time. Hope to see you all next meeting on June 2. 1999.

73 to all de Sigi W2JQ

Call 598-1353 and make your reservation, or e-mail Sigi. My E-Mail is: w2jq@boernert.com

Digital Signal Processing

In recent years there has been a trend toward processing communications signals using digital signal processors in stand alone units or integrated into the newer state of the art communications equipment. The advent of reasonably fast inexpensive microprocessors coupled with the ability to design into the large scale integrated circuit all the devices necessary to digitally process a signal allows the average amateur to use these techniques. The personal computer also brings into the ham shack processing speed and power with large amounts of read/ write memory for handling digital signal processing. The large hard drives provide not only the application storage but very large virtual memory for analog signal conversion. Most PC's have a built in DSP (digital signal processor) in the form of the sound card. With this card and the appropriate software the typical amateur can experience all the digital modes available to the hobby including the oldest mode CW. These digital modes provide an excellent opportunity for the newcomer to the hobby to demonstrate their computer prowess.

The digital modes that are referred to include standard teletype (RTTY) both baudot and ascii, packet, pactor, amtor (arq & fec) and phase shift keying (PSK) both BPSK and QPSK. For all these modes there are software pro-

grams available as shareware or freeware from a number of sources on the internet. These programs have been written for 16-bit sound cards that are Soundblaster compatible (applies to most all 16-bit cards). In today's market the 16-bit sound card may be obtained for as little as \$10.00.

Why DSP? As with any mode and equipment combination there will be advantages and disadvantages. Several advantages include: 1) The cost is low compared to the standard Multimode controllers; 2) It is easy to upgrade the software (no EPROMS to burn or replace); 3) There is a lot of software available. (all you have to do is find it); 4) There is software for all the listed modes; and 5) there is also software available that will turn computer and display into analyzers, digital storage oscilloscopes, audio filters for SSB or CW, autocorrelation filters, and automatic notch filters. Some of the disadvantages include: 1) If you do not do your own programming you are dependant on other authors to develop and share the application and for them to keep it working; 2) If you plan to have unattended operations you need to have a computer running all the time(Noise?); 3) You must search for the application that you wish to use that matches your computer and operating system; and 4) You must have a computer and a means of loading the application.

Where to Start, What to Use, Where to Search – A place to begin your searching for information on digital signal processing is the Tuscon Amateur Packet Radio Home page (TAPR). This page has a wealth of information on packet radio and numerous links to other pages related to digital communications. For the RTTY enthusiast the following page is an excellent place to look; <http://oxford.megalink.net/~n1rct/index.html>. This page has nearly everything concerning RTTY and a large number of links to other sites for software of interest to the amateur. [Http://muenster.de/~welp/sb.htm](http://muenster.de/~welp/sb.htm) is a site that is devoted to one of the best collections of information using the soundblaster card or those compatible 16-bit cards. If you want software that will turn you sound card into a communications digital signal processor, be sure to check this out. If you are interested in a full blown packet node or any portion thereof, go to <http://www.forthnet.gr/sv2agw>. George has some excellent modules that will drive any tnc including the Baycom modem and the sound card for packet. These modules will work as packet engines for some of the other packet terminal programs. WM2U has an excellent page at <http://qsl.net/wm2u> on digital signal processing with links for downloading software. In February QST there was an article on the recent interest in PSK (phase shift keying). The PSK31 home page may be found at <http://aintel.bi.ehu.es/psk31.htm>. Here you can find all the information you might need about PSK. It also provides download links for software including psk31sbw.zip version 1.06 software for doing PSK in Win-

dows with a 16-bit sound card.

Why the encouragement to look at DSP?

Over the years the radio amateur has been noted for developing new ideas on the cutting edge of technology as applied to communications. He has been not only a communicator but an experimenter in the development of better ways to exchange information. In days of yore, the newcomer (novice) purchased a receiver and then recycled a couple of TV sets for components for his first transmitter (which he built). Today this is not possible. The development of inexpensive microprocessors and large scale integrated devices makes it possible for the manufacturer to design, construct, and sell equipment which out perform anything that we were able to purchase in the old days. Surface mount technology makes it nearly impossible for the average amateur to design, build or repair much of the communications equipment marketed today (this applies also to home entertainment devices as well). The cutting edge for our experimentation lies in the application of components/ peripheral computer cards that are readily available in these digital modes. With crowded, noisy band conditions the digital modes allows the use of narrow regions of the band (typically center audio frequency plus the frequency shift) for communications. These digital modes also offer the greatest reliability during emergencies. With automatic logging and printing of the data, the necessary information may be passed between sites involved in emergency communications. The digital modes are an area where the new amateurs of today have the

opportunity to demonstrate their expertise. The TECH and TECH+ are allowed to use any and all of these modes.

For Sale/ Wanted/ Swap

FOR SALE: ADI AT-600-HP dual band HT for sale.

It has less than 30 min. of transmit time.
200 channel 120 w/alpha numeric tags
5W Lighted Keypad

Dual Receive (VHF/UHF at the same time)
Voltage Meter

PC Programmable

Alpha Numeric Tags - 7 characters

\$ 2 0 0 . 0 0 (R e t a i l 3 0 0 . 0 0)

Eric Gissendanner W4GIZ
jericg@peganet.com

WANTED: I am looking for 2 EPROM chips from an OKIDATA ML92/93-IBM (graphics compatible) printer? I have an ML 92 (without the -IBM extension) but it won't print graphics therefore I can't use it with windows. I checked with Okidata and they say it's too old to help me with. If I could BORROW the two chips from someone's 92-IBM printer, I can copy them and return them unharmed.
Vic--W3TDU

EMAIL vicberger@juno.com

FOR SALE: Lakeview Hamstick for 20 Mtrs \$12.00; Pro-Am (like Hamstick) for 15mtrs \$12.00; Lakeview Carolina Bug Katcher 10-40 Mtrs \$75.00; Cushcraft D4 10-40 Mtr rotatable dipole (1000W) Used only 6 months \$175.00; New Hustler Bumper Mount \$15.00. Heathkit SB-200 Amplifier 10-80 Mtrs \$325.00. Jim Ackerson W0RFO/4 649-5553.

Announcements

May 25 – Club Technical/ Business meeting Shepherd of the Glades Church on Rattlesnake Hammock Road, Naples FL at 7:30 p.m.

June 2 – Dinner Meeting at Pacific 41 Restaurant – Call Sigi at 598-1353 for reservations.

June 18 – Deadline for reports for newsletter.

June 26 & 27 – FIELD DAY at Phil's place. No regular meeting this month

July 27 – Club Meeting at 7:30 p.m.

Map to Phil's - N4VMT

