



# ARASWF

## Newsletter



Vol. XXIV No. 7 The Journal of the Amateur Radio Association of Southwest Florida – July 2008

### Club Information

Meeting Time: 4th Tuesday 7:30pm  
Golden Gate Community Center  
4701 Golden Gate Parkway  
Naples FL

**Club Repeater:** WB2QLP  
146.670 (-600) PL 136.5  
EOC Repeater: WB2WPA  
147.030 (+600)

**Club Web Site:**  
<http://www.araswf.org>

### **Club Officers/ Chairpersons**

**President:** KK4PG  
Peter Gaddy

**Vice President:** KI4UAT  
Tim Gibbons

**Secretary:** W2HI  
Bob Graf

**Treasurer:** K2ZEL  
Bill Reynolds

**Past President:** KK4PG  
Peter Gaddy

**Technical Director:**  
Tim Wallen, KC4SSD

**Emergency Comm. Director:** N1DL  
Karl Geng

**Newsletter Editor:** KG4ZLB/M0ZLB  
David Worboys

<http://www.m0zlb.com>

**Webmaster:** W2HI  
Bob Graf

**Ops. Director:** Vacant

**Public Information Officer:** Vacant

**Special Events Coord.** Vacant

**Awards Manager:** Vacant

**VE Liaison:** Vacant

**Social Chair:** Vacant

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Next Meeting will be held on July 22<sup>nd</sup>, 2008!!

### From the President's Shack

Many thanks to Joe, K9KNW for again providing an excellent venue for Field Day 2008. Propagation, except for 6 & 10 Meters was awful; considering the conditions, I think our results were pretty good.

Please bring your complaints, gripes, and suggestions to our next meeting so that we can make some constructive changes for next year.

73's.

Peter  
KK4PG



### Echolink update

Carl, WA9ZIF reports that currently the Echolink system is inoperative and that as he may have to order parts it may be some time before normal service is resumed. Please watch this space or log in to the weekly nets for updates.



### Field Day 2008 Report

On June 27 and 28, 2008 ARASWF members, using the call W4F, participated in the ARRL annual Field Day from (Southern) Collier County, FL on the property of K9KNW. This is the second year that the club has used this site for Field Day. Twenty- four members crewed the five radios during the 24-hour event collecting 1149 QSO's including 6 PSK contacts on 40m at the GOTA station. 1099 of the contacts were by phone, and 19 contacts were CW. The band breakdown may be found in the chart.

Members participating in the event were K9PWQ, AA4GT, K9KNW, K2ZEL, KD4VRY, NJ2F, K4ADR, W4SFR, N2URV, K4CPT, W2HI, K4ZH, KI4PZP, W4YOE, NS0I, KC4SSD, KI4HEU, KI4UAS, KF4MJJ, KI4MIA, WD8RFL, KG4ZLB, KK4PG, and W4BN.

The planning committee wishes to thank all the members that supplied equipment for the event. Particular thanks are extended to our host, Joe K9KNW for the gracious use of his property. Special mention goes to Mike WD8RFL for putting together the combination wired/wireless network using Write Log software. The network actually worked this year. Only the GOTA and VHF radios were not in the network.

Special mention must be made to the procurers of the food. Peter, KK4PG and Bob, W2HI did the shopping and put together the menu. Outstanding food always helps this annual event.

Our power class this year was less than 150 watts. This gives us total QSO points of 2298. At the writing of this report it appears that we will have 170 or 220 bonus points. At the July meeting there will be a discussion of the event and notes will be collected for next year's committee.

Band	Mode	QSO
80m	Phone	13
40m	Phone	185
40m	CW	1
20m	Phone	277
20m	CW	18
15m	Phone	123
10n	Phone	318
6m	Phone	165
GOTA	Digital	6



**Amateur Radio Association  
of Southwest Florida, Inc.**



**W4F**

**Field Day, June 28-29, 2008**

CONFIRMING QSO WITH	DAY	MONTH	YEAR	UTC	MHz	RST	MODE	QSL
								PSE TNX



**ARASWF**

P.O. Box 111604, Naples,  
Collier County, Florida, 34108 USA

EL96

A comprehensive set of photographs from Field Day 2008 are on the web site - just visit [www.araswf.org](http://www.araswf.org), and click on the link on the opening page under "What's New". There are far too many to include in the Newsletter so please visit the website to view them!

## New Members

Unfortunately none this month!

### AF MARS Emergency suit case station AFA2BF

While my XYL was in the hospital (and currently recovering at home) - I was busy assembling and testing an emergency suit case station for phone and all digital modes and getting it ready for the storm season.

Here are some pictures so you get an idea. Not shown are the PC, some antenna material and the 1 KW portable generator and battery backup.

Everything fits into a watertight Pelican 1550 case and is fitted into 3 layers of foam. Image 0080 shows the SEC1223 Power supply on the left and the YAESU FT-857D on the right together with the control head on the lower right and microphone and keyer to the left of it.



This image shows the telescopic stinger of the manual screwdriver antenna (the tripod base and screwdriver coil section are not shown)



This image shows the complete case closed - (looking for a sticky MARS logo to put on the lid.)



In this image you can see the second layer with manuals, extension cords, USB cables, the SCS PTCII USB/Blue Tooth Pactor III modem on top with the Signalink USB digital modem to its right.

Of course all power, data and audio cables as well as a Volt/Ohm meter and small tools are included. The PC case has the MARS documentation (freq list, EEI info etc) and the remaining antenna material. I use miniature coax throughout. Everything was tested and the station works well in SSB, CW, Pactor, MFSK, MT-63, and Amtor and RTTY modes. The PC is an Apple Mac Book running both the Apple OS-X and Windows XP in a virtual PC. The station is ALE capable as well when used with a broadband antenna. It can link to the Internet via Pactor III Winlink and ALE.

Inventory list AFA2BF portable station:

- 1 Pelican case 1550 with foam inserts
- 2 Yaesu FT-857D transceiver with DC cord and microphone
- 3 SEC 1223 Power supply 240/120V 20A with AC cord
- 4 SCS PTC II USB/Blue Tooth Pactor III modem with USB, audio, rig control cables and 12V power supply.
- 5 Signalink USB sound interface with USB and rig control cable
- 6 Palm Radio Mini-paddle for CW with cable
- 7 Superantennas manual screw driver vertical with stinger and counterpoise wire bundle
- 8 Documentation and manuals for transceiver, PTC, PS and Signalink
- 9 AC extension cord and triple splitter
- 10 USB hub
- 11 Ethernet cable
- 12 USB to Ethernet adapter
- 13 PC control cable for FT-857D (ALE operation)
- 14 USB to Serial Port adapter
- 15 Digital Volt/Ohm meter
- 16 Small tools and clip leads
- 17 Miniature coax and various BNC/PL259 adapters
- 18 MARS info (EEI format, frequencies etc), log, paper & pens

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**Trading Post**

For Sale - Icom 706MKIIG, New 6-8-6. Opened for 60 Meters. Manuals and Boxes.

Upgrading. Price \$650.

Call George AA4GT at 774-1759 Home and 272-1759 Cell

Wanted - Power supply unit (PSU) max 25amp draw - preferably with meters but nothing from Radio Shack thx ☺

E-mail David at [MOZLB@btinternet.com](mailto:MOZLB@btinternet.com) with what you have and what you want for it!

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## ARES/RACES

My fellow hams; Hurricane season is here! Are you ready?

We need EComm operators for Hurricane season. We need them for all four hospitals, the EOC, Shelters, etc.

The idea of having EComm operators all ready at these areas is important, but boring! You may spend 4 activations just sitting and reading a book. However on the 5<sup>th</sup> activation, POTS and Cell service may die and the 911 systems may take a dump. This is when you will be needed. As we have not mastered the instant transporter, we have to have the people already on site. This means you!

I need all hams to let me know what shelter, hospital, or the EOC you would like to work.

I need the ham community to step up and commit to a shelter, hospital, or work at the EOC during activation. I am working on becoming an Instructor for the ECOM - 001 course.

Thank you

Fred Edwards, KF4MJJ (239.252.8000) [frededwards@colliergov.net](mailto:frededwards@colliergov.net)

Requirements for Collier County ECOMM Operator

ICS 700 (free on line at <http://www.training.fema.gov/IS>)

ICS 100 (free on line at <http://www.training.fema.gov/IS>)

EC-001 (At the ARRL website)



## ALE (Automatic Link Establishment)

ALE - yet another technical challenge by Karl N1DL

"**Ale** is a type of beer brewed from malted barley using a top-fermenting brewers' yeast." That is the definition you find in the dictionary. But today I am writing about ALE (pronounced "Ay" "Ell" "Eeh") the technology for "Automatic Link Establishment".



A few weeks ago I read in the QRZ news column that a Global Simulated Emergency Test communications exercise sponsored by the International Amateur Radio Union (IARU) was to be held in early May. It would make use of ALE and thus my interest was awakened and I wanted to participate.

What did I need in order to get my station ready for ALE. I knew that some commercial transceivers used by the military and federal agencies have ALE capability built in. But I was not about to spend more money on yet another radio to accomplish my task.

When I researched the subject I found that a British Ham G4GUO had written software that would run on a PC and using the soundcard capability could decode and encode ALE sounds and control a modern ham radio transceiver. This was exactly what I was looking for.

I downloaded the software and installed it on my laptop and prepared the cables for the audio link to and from the radio to the sound card. I already had the computer control cable from my logging program that would enable me to change the radios frequency from the PC.

But then the challenge really started. It's quite a steep learning curve to set up the parameters of the program and find all the answers one needs in order to get going. A great find was a web site established by a Ham Radio ALE interest group. There I found lots of tips, frequency allocations and a real time global monitoring log.

You may ask why ALE in the first place in Ham Radio when all it takes is to call CQ on a frequency and wait for a response. Well ALE allows you to automatically test connectivity on different bands at different times of the day, season of the year or period of the sunspot cycle. ALE systems send out "soundings" which other units receive and record together with the frequency, time, signal strength and signal to noise ratio. This creates a table of likely frequencies or channels on which at a given moment a station can establish contact with another station.

ALE stations use a number of channels in each amateur band for this purpose. They are designated for National, Regional or Global use and even for Emergency Communications. A popular channel to monitor is on 20 meters 14109 KHz. Here you can listen to the "soundings" and attempts to establish contact. Every station has a selective calling identifier or SELCAL. In ham radio we normally use our call sign for this purpose.

With my station finally set up and the software properly installed and customized with my call sign and other parameters I started to monitor 14109 KHz. After a while the screen filled with the data of soundings and call signs of ALE stations. So I picked NJ7C and



clicked on "call" then "individual" and entered NJ7C in the window that opened. Next I hit the green telephone button on the screen.

Wow! All of a sudden my transceiver started to go to transmit and sent out a 20 second burst of ALE tones. A few seconds after it returned to receive mode I heard another burst of tones and a little window said "linked to NJ7C" which my transceiver acknowledged with another short burst of link data.

I had made my first link-up on ham radio with another station using ALE.

Now what?

As it turned out NJ7C was one of the Pilot Stations that are part of the Global ALE high frequency network and located in North America, Hong Kong and Australia. These Pilot Stations operate 24 hours a day, every day of the week and are connected to the Internet. Utilizing the NJ7C pilot station I was able to send an SMS message to my cell phone and a short email to my Comcast account.

To disconnect all I had to do is click on the clear button (a red telephone) and a short data burst from my station to NJ7C disconnected the ALE link and freed up both our stations for other contacts.

A day later the Global Simulated Emergency Test started and I was ready to participate. The goal was to make contacts with other ALE stations and send a short message of the own stations emergency preparedness capability (e.g. generator power, battery power backup etc.) The various ALE channels on all bands were busy and one could monitor soundings everywhere. I am sure there will be a summary of the test available in due course and I will let you know what it says when I get it.

Since this first start I have also installed ALE on my Air Force MARS station that utilizes different but similar software and is used to both alert stations to switch to SSB on a certain channel or switch to a data protocol for message traffic.

In summary - Automatic Link Establishment is a great tool for the purpose of communicating between stations in real-time, while avoiding guesswork, beacon listening, and complicated HF prediction charts altogether. ALE is most commonly used for hooking up operators for voice communications on SSB and for Internet messaging, but there are many other useful features.

Primary ALE frequencies are:

3596.0 USB, 7102.0 USB, 10145.5 USB, 14109.0 USB, 18106.0 USB, 21096.0 USB, 24926.0 USB, 28146.0 USB.

PCALE will function with almost any amateur or commercial HF radio. For rapid channel scanning, PCALE uses the computer-to-radio CAT interface to control the transceiver frequency and mode.

Some transceivers are better suited to ALE service than others, for various reasons.

The following transceivers have internal circuitry that is optimum for fast Quiet Relay Scanning and Sounding with PCALE:

#### ICOM

IC746, IC746PRO, IC7400, IC756PRO (Mil spec 1030E-DSP), IC756PRO2, IC756PRO3, IC765, IC775, IC781, IC7800 (except mixer relays), PA relays handled by use of SPLIT VFO, all support up to 2 ch/sec scan rate, newer models at 9600 baud up to the 5 ch/sec and those that can do 19,200 baud at 10 ch/sec scan rate

#### KENWOOD

All Kenwood models after, but excluding the TS-440, PA relays handled by use of SPLIT VFO, all support up to 2 ch/sec scan rate, newer models at 9600 baud up to 5 ch/sec and those at 19,200 baud at 10 ch/sec scan rate

#### YAESU

FT-920, FT-990 with SPLIT VFO (FT-890 with special QS/S modification) all can do up to 2 ch/sec scan rate.

If you are interested in ALE go to the following links:

To read more about Ham Radio ALE: [www.hflink.com](http://www.hflink.com)

ALE monitoring: <http://www.geocities.com/n2uhc/ale.html>

My two stations running ALE are using:

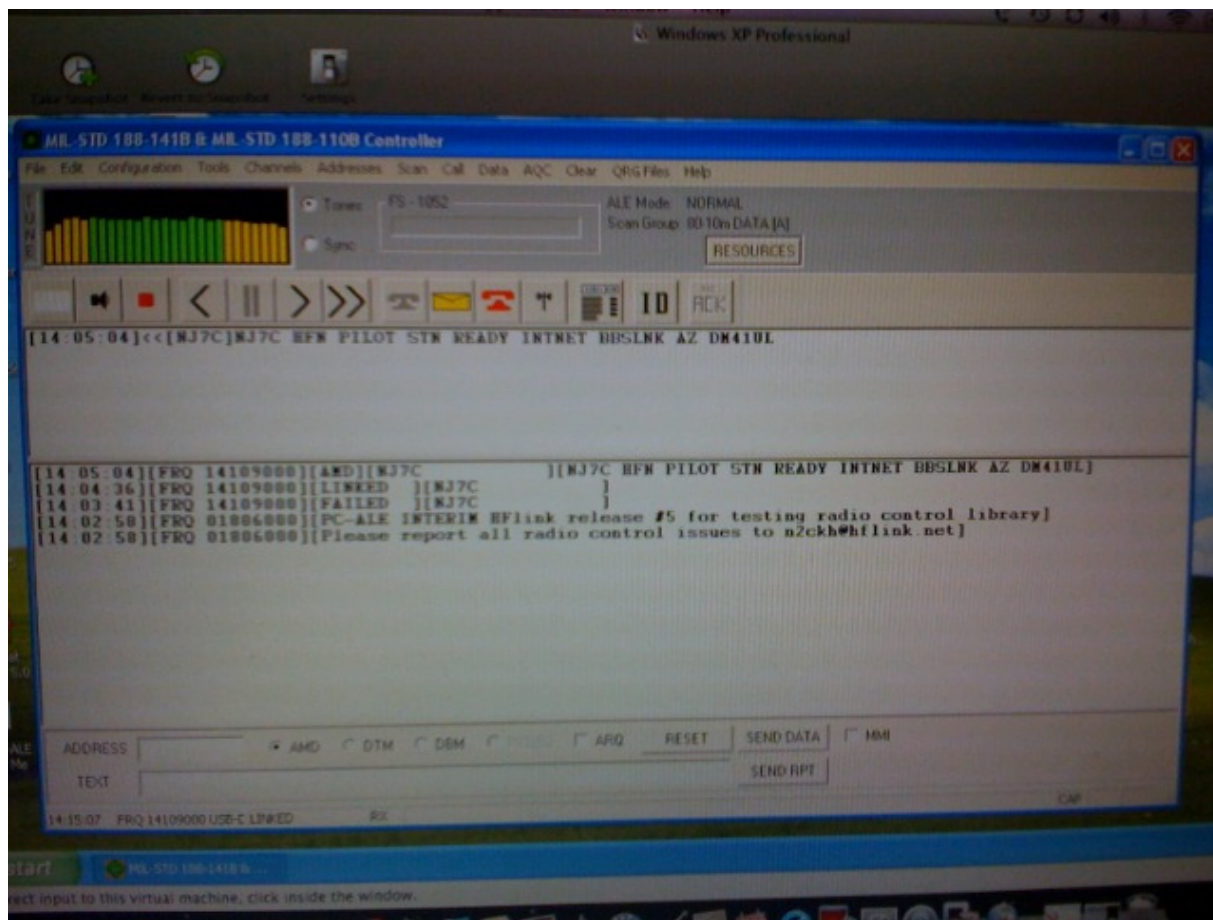
1. YAESU FT-857D transceiver and Signalink USB modem interface
2. ICOM IC-7800 transceiver and Rigblaster Nomic interface

Note the Signalink has a built-in sound card and all it needs is a USB cable to a PC

For sharp eyes - I am actually using an Apple Mac Book running virtual PC with Windows XP guest operating system.

Works like a champ.

This is the main screen of PC-ALE and shows the linked state to NJ7C Pilot Station in Arizona on 14109.00 KHz



#### Report Log of the ALE High Frequency Network HFN for IARU GlobalSET 03 MAY 2008

On the 3rd of May 2008, the ham radio Global ALE High Frequency Network (HFN) was activated to participate in the International Amateur Radio Union (IARU) Global Simulated Emergency Test (GlobalSET or GSET). Ham radio operators in various countries around the world were on the air using ALE High Frequency radio stations as part of this preparedness exercise for emergency / disaster relief communications.

<http://hfink.com/hfn>

The following 27 amateur radio stations were activated for GlobalSET on the air using ALE (Automatic Link Establishment) and logged by the reporting station system of the

ALE High Frequency Network (HFN). <http://hflink.net/gso>

=====

Stations Activated

=====

AB9MA  
AE6RD  
K4JPE  
K6DDW  
K6DLC  
K7EK  
KB3CS  
KE7ACY  
KK7IF  
KM4BA  
KN0CK  
KQ6XA  
KU2A  
NOPWZ  
N1DL  
N3OSO  
NJ7C  
NZ1I  
VE2FXL  
VK4TGV  
VR2HF  
VR2/KQ6XA  
W5DG  
WA2WDT  
WA3MEZ  
WB4AKK  
WD8ARZ

== GlobalSET ALE Messages 03MAY2008 ==

The following stations successfully originated and/or transferred standard GlobalSET Readiness Messages via ALE to the GlobalSET Headquarters:

=====

Originated - Transferred

=====

K6DDW via NOPWZ  
KB3CS via VE2FXL

KE7ACY via KQ6XA  
KM4BA via WD8ARZ  
KN0CK via NJ7C  
VR2/KQ6XA via VR2HF  
N1DL via NJ7C  
NJ7C via KM4BA  
VE2FXL via WA3MEZ  
WB4AKK via WA3MEZ  
WB4AKK via VE2FXL  
WD8ARZ via NOPWZ  
WD8ARZ via NJ7C  
WD8ARZ via KM4BA  
AB9MA via KM4BA

Band conditions were very poor that day - but nevertheless the system worked.

73 Karl N1DL



### Editors Ramblings

It was great to be back in time for Field Day and although I was unable to spend much time on site, it was nice to see a lot of members in attendance. I hope you enjoy the write up that is in this issue and the photographs that are on the Club website.

Now begins the task of shipping my station over from England and setting it all up again which is a less than attractive proposition but significantly cheaper than replacing everything so for the time being, I am limited to 5w through a handheld and a directional antenna! Back to basics then.

Thanks to Karl, N1DL for providing articles for this months Newsletter; the absence of a June meeting and therefore no Minutes meant that this issue could have been rather lean - as it is, I think it might be the biggest issue this year!

Until next month....

73

David  
KG4ZLB/M0ZLB



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the



**Amateur Radio Association  
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**Web Site**

[www.araswf.org](http://www.araswf.org)