



THE MONITORTM



ECARS Web Page: <http://www.ecars7255.com>

The official publication of the East Coast Amateur Radio Service, Inc.

From the Desk of ECARS Vice-President

Bob Schneebeli, W3EOP

Everything is running as smooth as silk on the ECARS net. I monitor the frequency every day at 12 noon and I want everyone to know that I got a new supply of black markers, so if any one of you step out of line "POW" you got a black mark. I give black marks to anyone and I mean anyone. All kidding aside, the bands have been very bad recently and the net controllers have done a fabulous job. I hope for a change in the band conditions soon.

The April Spring meeting in Hamburg, Pennsylvania went very well. We saw a great bunch of friends again, and met a few new ones. I had the pleasure of meeting ECARS president, John WA1STU and I wish him and all officers the best for the 2005 year. The food was very good food and we got a chance to walk around the new Cabela's. If you are a sportsman this would be your place to visit. If Cabela's don't carry what you want, then just forget it, it probably doesn't exist. My wife Dot made her chocolate chip cookies and I hope all the hungry moochers got their fill for a while.

I met Bob N3ZUA for the first time, and all I thought about was how much he looks like the baldheaded guy who dances on the six flags commercial. (Just kidding Bob!)

Let me end this with this Amateur Code: *THE AMATEUR IS CONSIDERATE...He never knowingly uses the air in such a way as to lessen the pleasure of others.*

73, W3EOP

Swap and Shop

Join us on 7.255 every Wednesday from 11:00 to 12:00 noon for the Swap and Shop, hosted by Roger, N2LAQ

From ECARS President

by John WA1STU #1489

Forty sure has been bad lately. Recently I've had more trouble checking in and running the net than since becoming a member of ECARS. I have to applaud our net manager and net control stations. They somehow keep the net running in spite of the terrible band conditions, folks tuning in on the frequency, and the few jammers that occur on 7255 kHz.

We had a great meeting in Hamburg, PA in April with 17 members attending. Quite a bit of net business was conducted, all the committees were formed, and we had a great presentation on digital TV from ECARS member Ray K3RIZ.

We are planning for a real big meeting in the Fall and I sure hope all of you can attend. It is always great to eyeball the faces of the folks who you talk with all the time. More will come out about the Fall meeting on the web page. Check it out at www.ecars7255.com.

Start thinking about the ECARS members in good standing who you want to manage our organization for 2006. Bob N3ZUA is the nomination chair for the next elections, so contact him and give him your thoughts.

As always I am available to talk with or contact any ECARS member by email.

73 and hope to hear you all on 7255

John

In This Issue

From the Desk of ECARS Vice President.....	1
From ECARS President.....	1
Forget to Put on the Sleeve.....	2
Meet Rich, AA2XK.....	2
WA3GIN Appointed as RACES Officer.....	4
ECARS Secretary / Treasurer's Report.....	4
This is Your Newsletter.....	4
Dayton 2005.....	5
The KP1-5 Project Needs Your Help.....	6
How to Live Alone Without Really Moving.....	7
An FT-857 Precaution.....	8
Ham Radio Operators Join Up to Help ILL Man.....	8
ECARS Spring Meeting Photos.....	9

ECARS Service - 7255 KHz - for Public Health, Safety, and Welfare

Work in Progress

ECARS cyberhams are working on an ECARS members' only link that will be on the ECARS web site home page. Once this is set up members will be able to enroll, select a user ID and password. Once they are certified as an ECARS member, the account will be activated. This will enable ECARS members access to the members' only portion of the web site where they will have access to the Monitor and other members' only information.

Forget to Put on the Sleeve?

Don't worry; I have a way around it.

by Mike Stone, N1VE

The other day I needed a short coax jumper to fit between my mobile radio and a permanently mounted SWR meter in the truck. I didn't want any extra cable in this installation so I carefully measured the distance between the connector on the radio and the connector on the SWR meter. I then cut a piece of coax to just the right length and attached and soldered PL-259 connectors on each end of the cable. Everything worked well and my multimeter showed that the cable was continuous where it should be and no continuity between the shield and the center conductor.

However to my dismay, as I've done many times before, I forgot to place one of the threaded sleeves on the cable before attaching and soldering the connectors. After doing such a nice job preparing this cable I wasn't going to take it apart to put that sleeve on the cable. I clamped the sleeve in a vice, made a longitudinally cut through one side with a hacksaw, spread the saw cut enough to slip the sleeve over the coax and clamped it back together with a stainless steel hose camp.

So don't fret the next time you forget to place the threaded sleeve on your coax there's another way to get around the problem. ☺



Meet Rich, AA2XK

Ham radio started for me on July 27, 1993-with the novice call sign KB2QLF. The meaning of QLF is "send with left foot". During most of my QSOs, I repeatedly got the question; do you know what that phrase means? My reply was yes, and I knew the call had to go! I received my Tech license in 93, my General in 94, Advanced in 95, and finally the Extra that same year. The QLF was then changed to AA2XK, and I will keep this one until I become ASK, a silent key! I've been a member of the Larkfield Amateur Radio Club for 12 years, including the eight years I was a board director. I participate in the clubs events such as Field Day and other special service events as well as being a VE instructor for new hams. I also enjoy being a member of ARES/RACES, an organization that helps maintain emergency communication procedures. We worked very closely with the Red Cross during the 911 disaster and were among the first to arrive on the scene. I enjoy the bands 10-160 and also like digital modes with Rigblaster as well as satellite communications.

Most of my HF work is on two bands; 75 meters and 40 meters. I also enjoy those as mobile bands. The rest of my time is spent with my friends and family, my wife Rosanne, my children, Tracey, Kimberly, and Richard, and of course all of my grandchildren who have all been on the air. Christopher is 15, Mary Kate five, Rosalie (photo) three, Joseph two and Madison one. They all assist me at times as net controller on Wednesday's at 8:45-10:00 AM. We all look forward to speaking with you soon on ECARS or on the Graveyard Net from 6:00-8:00 AM.



Rich, AA2XK and Rosalie

The Only Official ECARS Website



www.ecars7255.com



ECARS Service - 7255 KHz - for Public Health, Safety, and Welfare

Arlington County, Virginia Appoints WA3GIN as RACES Officer

by Ed Harris, KE4SKY, March 21, 2005

David Jordan, Arlington County's chief information security officer (CISO), was appointed March 18, 2005 as Arlington County's Radio Amateur Civil Emergency Services (RACES) officer. An employee of the County's Department of Technology Services, Jordan is detailed to the Office of Emergency Management, responsible for emergency technology and Emergency Support Function #2, Communications.

Prior to joining Arlington County government, Jordan spent 18 years at MCI where he held several engineering positions, including advisory engineer to the Systems Integrity Division and director of technical security. Jordan has been with Arlington County since early 2001 when hired as the County's first CISO. During his Arlington tenure, he helped pioneer and deploy Arlington Alert (www.arlingtonalert.com) one of the nation's first, comprehensive text-based emergency alert and notification systems, using duplicate, redundant computer servers to provide an enterprise wide platform with seamless failover. Arlington County was the first local government in the National Capital Region to deploy this text-based alerting system, now being fully implemented in surrounding Metro area jurisdictions. Thousands of users including first responders, employees, key businesses, volunteer groups and the public can be alerted simultaneously, in seconds via email, pagers, cell phones (via SMS) or other mobile devices. Arlington Alert was fully functional by October 2002 and has been used numerous times during all-hazards incidents, including the Blizzard of 2003, Hurricane Isabel, and to warn citizens to shelter-in-place during the recent tanker explosion near the Pentagon on I-95. Jordan's goals for emergency communications in Arlington include training non-amateurs, such as Community Emergency Response Teams, to provide effective 2-way radio communications for damage assessment, community preparedness, health, safety and welfare, whenever needed. He hopes to enlist some of the more than four hundred licensed amateur radio operators living in Arlington to assist in this effort. Jordan said, "The county has some very active amateurs who are providing good support currently and I want to better enable those already providing support while also growing the capability to better serve the county." Bringing together a coordinated emergency communications team of amateur and non-amateur groups, which could evolve into a member of an inter-jurisdictional mutual aid support system throughout the Metro area is the ultimate goal for Arlington's Emergency Management Office. Second on the list is to establish a formal RACES organization within the County -- one where RACES and Amateur Radio Emergency Service members can grow their skill sets, upgrade their FCC operating licenses and partici-

pate in emergency exercises, together providing Arlington a proactive and well-trained emergency radio communications infrastructure. Jordan is an avid HF/VHF mobile radio operator who holds an FCC Amateur Extra license and was first licensed in the early 60s. He serves on the board of directors for the East Coast Amateur Radio Service and the Arlington Radio Public Service Club, where he is also first vice-president and chairman of the repeater committee. He is also founder and trustee of the Northern Neck Amateur Radio Club and well known as being one of the first amateur operators in the mid-Atlantic region to successfully construct and operate a totally Internet Remote Amateur Radio (IRAR) HF station. Jordan was born in Washington, D.C. and is a lifelong resident of the metro area.

<http://www.eham.net/articles/10536>

For Sale

Hammarlund HQ-170C, SSB (upper, lower, both) CW, AM, 160-6 meters receiver. Like new condition. Includes matching speaker and users' manual. Receiver is complete with clock selectable filters from .5 KHz to 3 KHz and tunable slot filters. Adjustable noise limiter as well as selectable AGC. I am the original owner and am very fussy with all of my gear. The price is \$250.00 plus shipping to the lower 48 states only. As good as the receiver is it is still sold AS IS, but not DOA.

I will accept a money order of certified check. I will wait for seven days for the check to clear.

Email me for photos at:

rdipippo@rinet36.org
Robert DiPippo, K1WYC





**ECARS
Secretary / Treasurer's
Report**




Charlie Stampf, N2CJ

**ECARS
Net Manager's Report**

Joseph S. Reppert, WY3T

Cash Flow
1/1/2005 Through 5/22/2005

INFLOWS	
Uncategorized	0.00
DECAL	10.50
Dues - New	825.00
Dues - Renewal	1,810.00
Dues PayPal	428.21
ECARS Jacket	101.97
ECARS Pin	33.70
PATCHES	45.40
TOTAL INFLOWS	3,254.78
OUTFLOWS	
Annual Meeting	68.90
Corporation Fees	25.00
JACKETS	90.44
Office Equipment	69.98
Office Supplies	175.28
Postage	38.00
Postage and Delivery	823.09
Printing and Reproduction	551.97
Web Page	99.00
TOTAL OUTFLOWS	1,941.66

**Account Balances Report
(Includes unrealized gains)
As of 5/22/2005**

Account	Balance
ASSETS	
Cash and Bank Accounts	
Checking	2,124.73
TOTAL Cash and Bank Accounts	2,124.73
Investments	
CD	5,703.20
TOTAL Investments	5,703.20
TOTAL ASSETS	7,827.93
LIABILITIES	0.00
OVERALL TOTAL	7,827.93

ECARS Net Manager's Report

It's hard to believe that five months have already passed in 2005. The net is running very well. We have the usual schedule changes due to personal situations with various net control stations. Basically everything is in great shape.

There have been several incidents created by discontented individuals who have tried to defame and disrupt ECARS and the service that we provide. These efforts have been in vain. The All American wholesome ideals that ECARS has always stood for are still projected by the daily operation of the net. We have always welcomed "Any One Any Where" during our call for check-ins, for both members and non-members.

I want to thank all of the NCS for their dedication during their daily activities. Your individual personalities are what make ECARS the great net that it is.

We had a very nice Spring meeting in Hamburg, Pennsylvania on April 23, 2005. Everyone enjoyed themselves with all the good food and fun. There are some great pictures taken at the meeting on the website.

"THANKS FOR BEING THERE" and keep up the ECARS tradition.

This is Your Newsletter

I'd like to thank all who contributed articles and photos to this issue of ECARS' Monitor: Bob Schneebeli, W3EOP, by John Zorger WA1STU, Rich Hiller AA2XK, Charlie Stampf N2CJ, Joe Reppert WY3T, David Jordan WA3GIN, Brad Farrell K4RT, Bob Popella N3OO, Mary Popella N3YL, JoAnn Schaeffer, N3JRX, Ray Kiesel, K3RIZ, and Joseph Blithe WB3GVD. I'm sure all ECARS members appreciate your efforts.

I'd like to remind ECARS members that we are always looking for articles and photographs about ECARS members', their travels, radio experiences, equipment modifications, tower and antenna projects, and anything else that might be of interest to members of our organization.

Please send articles and photos via email to n1ve@amsat.org or by snail mail to Mike Stone N1VE, 32 Carraige Rd., Gilford, NH 03249.

Editor

Dayton 2005

by Bob N300 and Mary Popella N3YL

Why Dayton? What makes this hamfest so special and equal to none other? Why do hams from all over the world travel to this town in Ohio for the Hamvention? We don't know if there is one specific reason for the Hamvention's uniqueness, but we can tell you it is the ultimate hamfest, which can be a lot of fun and, as with any hamfest, it is what you make it; whether you go to see the new equipment, meet vendors, attend forums, hook up with friends – both new and old, or enjoy walking through the enormous flea market until your feet bleed. The Hamvention can be compared to the ultimate roller-coaster ride at an amusement park anywhere in the world for those folks seeking something special.

We feel that there are three main criteria to follow when planning a trip to the Hamvention: be prepared for any kind of weather, take lots of money with you, and wear the most comfortable shoes on the planet! The rest will fall into place once you arrive. Then the fun begins.

We've been attending the Hamvention since the early 1980's and have noticed several changes throughout the years. This year there seemed to be more female attendees than in year's past, along with an increase in the number of teenagers. It could be possible that wives now attend with their husbands just to keep an eye on the spending, but we'd like to think there are more YLs now obtaining their ham tickets.

Hara Arena hasn't changed much over the years and the next two Hamventions will still be held there in 2006 and 2007. Suggestions have been made over the years to DARA (Dayton Amateur Radio Association) about changing the location, or even moving it to a different state altogether. So we'll have to wait and see what happens after 2007.

It's about a 7-1/2 hour trip for us from northwestern Pennsylvania and we had rain on Thursday (our travel day). Friday turned out to be decent, although it was overcast and cool. Saturday was the perfect weather day for the hamfest with bright sunny skies and temperatures around 72 degrees. Our accommodations at the Holiday Inn North were superb and we were treated exceptionally well. This hotel is located just four miles from Hara Arena and they provided the hams staying there with a shuttle van that transported us to and from the arena. Our own vehicle never left the parking lot of the hotel once we arrived on Thursday. And once we were at Hara Arena and were ready to leave, a phone call was all that was needed for them to pick us up. We had folks staying in our hotel from Italy, Ireland, and Spain and got to chat with them either in the shuttle van, the elevator, or the hotel restaurant. It's always fun to talk with someone from another country who is attending the Hamvention for the first time.

There did seem to be fewer vendors in the flea market this year than in other years. Some folks we spoke with

were of the opinion that the cause of this is due to on-line buying/selling of radio gear and due to the high cost of gasoline prices.

However, we weren't disappointed in what we saw and even managed to pick up a few goodies.

The highlight of our trip this year was meeting Bob Heil (K9EID) of Heil Sound and his wife Sara. We were able to talk with him early Friday morning before Bob was swamped with "customers". He is truly a nice person, a good friend, and he has done a lot for ham radio. We also were fortunate to meet some of the folks from the ARRL and that was also very enjoyable.



Bob N300, Bob K9EID, and Mary N3YL

There's no question that the Dayton Hamvention is a very special event and if you've never been there, you should try to go at least once in your ham career. And, as the saying goes, "If you can't find it at Dayton, you won't find it anywhere".



Mary N3YL and Norm W3IZ

The KP1-5 Project Needs Your Help

The Following extract is from the DX column of CQ Magazine, June 2005, by Carl Smith, N4AA

A major project is underway to allow American citizens to legally go to Navassa (KP1) and Desecheo (KP5) islands. These two have been very high on the Most Wanted lists for some time now, but no one has been allowed to "legally" go there. A group is working with members of the US Congress to pass legislation which would make it possible. Please see the photo of the group who were in Washington, DC in April and read the following announcement from them.....

"Hams representing the KP1-5 Project took their case to Washington, D.C. on April 8, making the point that the U.S. Fish and Wildlife Service (FWS) has wrongly closed Desecheo (KP5) and Navassa (KP1) islands, both National Wildlife Refuges in the Caribbean, to law abiding American citizens while turning a blind eye to trespassers and aliens who use the islands at will and leave garbage and start fires in these wildlife habitats.

It has been just over ten years since the last authorized DX operation from either of these entities. No wonder they are listed at Number 7 (KP1) and Number 8 (KP5) in N4AA's most-wanted world survey of needed entities!

The biggest challenge facing the KP1-5 Project team now is to motivate ham radio operators to contact their Congressmen or Congresswomen. The very difficult goal of getting a bill introduced with bi-partisan sponsorship has been reached with H.R. 1183. However, that is not enough. Although several representatives have signed on as co-sponsors for H.R. 1183, some members of Congress have not heard from a single Amateur Radio operator about the bill. If H.R. 1183 comes to a vote before hams have contacted their Congressional representatives we cannot expect it to pass.

The FWS has an important mission in preserving wildlife habitat. However, the agency wrongly claims that the National Wildlife Refuge System Improvement Act of 1997 (NWRISA) allows only wildlife-dependant recreation activities on Navassa and Desecheo. It has additionally cited unsubstantiated safety reasons. H.R. 1183 would require FWS to open Desecheo and Navassa islands to limited, lawful, public use which would be restricted by existing FWS regulations, which are designed to protect wildlife in the nation's refuges. H.R. 1183 is related only to the islands of Desecheo and Navassa in the Caribbean. The bill would not change the law; it would simply require FWS to do what it is required to under NWRISA. It is worth noting that no federal agency that previously managed the Desecheo and Navassa refuges

has ever, to our knowledge, authorized Amateur Radio on these islands except under the most stringent guidelines described in Special Use Permits intended to protect wildlife.

What are the purported dangers? FWS claims that Navassa's habitat is so fragile that humans should not go there because of danger to the eco-system, and Navassa's lack of a beach makes sea landings dangerous. However, the facts, taken from the FWS' own records reveal that Navassa has one of the healthiest refuge habitats in the world. Haitian fishermen have fishing camps on the island with primitive cooking and sanitation facilities in use year-round. Government employees on Navassa for field work do not tell the trespassers to leave. There are recent photos of government personnel visiting with Haitian fishermen taking shelter in the former US Coast Guard Lighthouse building which is off-limits to American Citizens. FWS has even recommended a permit program for unsupervised, Haitian trespassers while barring Americans who seek to obtain permits to visit the refuge under existing laws and stringent FWS regulations! Haitians and FWS personnel make safe sea landings regularly, so why can't Americans, hams?

Desecheo has been declared unsafe by FWS for American citizens to visit because of alleged drug smugglers, illegal aliens, and because it was a bomb practice range during WWII and a few years thereafter. Again, FWS records reveal that FWS personnel have hiked and camped all over Desecheo for a quarter-century. There is no evidence that anyone has ever been threatened or harmed by drug smugglers, or anyone else. The last report of drug smugglers was 15 years ago! In 2002 the U.S. Army Corps of Engineers visited the island looking for any remains of unexploded ordnance and a U.S. Navy explosives demolition team followed. All the old bombs they found were destroyed by the Navy demolition team – all three of them! Yet, as recently as March of this year an application for a Special Use Permit for Amateur Radio on Desecheo was denied for these very reasons.

How can you help? Go the KP1-5 Project website www.kp1-5.com for complete background information and step-by-step instructions on how to contact your Congressman. The Lone Star DX Association, which has been granted 501(c)(3) status by the Internal Revenue Service, accepts donations for a legal/education fund. Your participation is critical to saving these DX entities, and others that might become victims of overzealous government bureaucrats. **Every single e-mail to Congress makes a difference!** “

We can make a difference just by spending a few minutes sending an email to our respective congressmen. If you don't need to work these islands for yourself, consider your friends who may never have had the chance to do so. And, if we don't do something now, they may never have the chance to work them.

"Copyright © 2005 CQ Communications, Inc. All rights reserved. Reprinted with permission."

How To Live Alone Without Really Moving

Reflections of a woman whose husband became a ham radio operator.

by JoAnn , N3JRX

Joe Jekyll and I had been married about three years, having what I thought was a rather great relationship. He was romantic and impulsive. He would decide at the drop of a hat to take me to the mountains for no other reason than to be alone together, talk, and listen to the rain. He'd buy me little gifts just to surprise me and make me laugh. He wanted us to always be together and made me feel as if it were he and I alone against the world.

Little did I know that lying dormant deep inside of Joe Jekyll was a ham radio operator KA3HYDE...sadistic, unfeeling and totally effected with talking to the world.

It started innocently enough. There was an old CB radio lying around the house that he hooked up and I, being totally naive to the fact that this would be the medium for HYDE'S escape, thought, "This is great, now he'll have something to do while I'm cleaning or working in the garden".

We started doing radio things. We bought radios. We fixed old radios. We went to visit people with radios. At the time I wasn't really concerned. I thought, "He's like a kid with a new toy, let him have his fun".

Then one day he came home from work and told me we were going to go to classes to become hams. An uneasy feeling awakened inside me. "I don't want to be a ham", I said. "You go."

I didn't notice the sadistic humor of the awakening KA3HYDE in his eyes as he started to lead this little lamb to the slaughter. All I heard was Joe Jaclyn's pleading voice saying, "Please go with me Hon, it will be fun. When we're done you will be able to talk to Australia."

I didn't know that when we were done, it would be easier to get through to Australia than it would be to get through to Joe. He would be gone, only KA3HYDE would be left.

When you go to ham radio classes you don't learn how to talk to Australia. As a matter of fact you don't learn how to talk to anyone at all. What you learn at ham radio classes is Morse code. Morse code gives you nightmares. Monsters chase you saying Dit Dit Dah Dit. I hated the code. Joe Jekyll started to become obsessed and tempers grew short. He had to learn the code. He was driven.

Joe started to slip away. I would come home from work and say, "Hi Joe!" He would look at me in a dazed sort of way and mumble, "Dit Dit Dah, Dit Dit Dah Dit".

Weeks of code classes went by, but it seemed like years. Tempers grew shorter and shorter. He couldn't sleep. He sat into the wee hours of the morning in front of the radio changing the dial and listening to code.

I slept alone. The dogs began to feel sorry for me. With a look of disgust at their master, they would follow me into the bedroom to offer their company and comfort.

Finally, after what seemed like an eternity, Joe passed the code! Thank God.

I thought it was over. I was wrong, the transformation had just begun.

His gentle blue eyes became ominous slits as he paged relentlessly through radio magazines, looking for the ultimate weapon of torture. He decided to spare no expense. He bought a Kenwood.

Night after night he subjected me to endless hours of listening to, "KA3ABC this is KA3EFG, KA3HIJ this is KA3KLM, KA3HELP this is KA3HELL".

When I tried to escape to the living room to watch a few minutes of TV and regain my senses, he would chuckle sadistically, key the mic, wiping out whatever hope I had of a moment's peace. I had no choice. I had to listen.

For days I would come home from work, tired and frustrated. He would order me immediately, with no rest, to trudge to the mailbox to look for physical proof of his new demented identity, his call sign.

On Friday the 13th it came. No longer was I living with gentle Joe Jekyll,

I now lived with KA3HYDE.

MEMBERSHIP APPLICATION

The East Coast Amateur Radio Service, Inc. (E.C.A.R.S.)

Call _____ License Class _____ Date First Licensed _____ (mo./yr.)

Renewal? Y/N ___ If 'Y'es please enter your ECARS number: _____

Name _____

Street _____

City _____, State/Province _____

Zip/Postal Code _____ - _____

Home Phone (_____) _____ - _____ Work Phone (_____) _____ - _____

E-mail _____ Check if OK to publish ()

Signature _____ Date _____

Please return this form with \$7.50 check or money order (or use PayPal) to: **E.C.A.R.S., PO Box 5923, Hudson, FL 34674-5923.** Membership duration shall be for the period of one year and shall be renewable on the anniversary date of the member's enrollment in ECARS.

ECARS Service - 7255 KHz - for Public Health, Safety, and Welfare

An FT-857 Precaution

by Ray Kiesel, K3RIZ

The Yaesu 800 series HF-VHF-UHF transceiver series has become quite popular in the past few years. I originally purchased an FT-817 low power unit (5 watts) for portable work and it quickly found its way into the mobile environment. The overall flexibility and small size was unsurpassed. Shortly after the 817 became popular, the FT-897 and FT-857 were introduced. The 897 and 857 share the same circuitry, in part similar to the 817, but the physical form factor is much different. The 897 is quite a bit larger but has the ability to include batteries or an AC fed power supply within its case. The 857 sports a removable/ remote-able control head and is ideal for mobile applications. Both the 857 and 897 are capable of 100-watts PEP output on the HF bands.



FT-857

Since the general menu format is very similar, I decided to acquire an 897 for the home shack and an 857 for the auto. Similar menu formats allow me to switch between rigs with a minimum of mental confusion...a very good thing for aging hams with menu driven equipment!

A Disappointing Incident

A couple of times each year I travel to Maine for recreation, relaxation, reading, and rest. Activities include hiking and snow shoeing. I also spend a considerable amount of time listening and communicating on HF from many scenic locations on the coast. An added benefit is a virtual lack of man-made electrical noise. ECARS becomes a hub of activity that allows me to contact friends while in Maine.

One day last January, I found myself on the coast listening to ECARS, reading, and enjoying a sunny day with an unusual temperature in the 30s. The auto ignition key was in the ACC (accessory) position. At the end of the afternoon, I turned the key to start the car and head back for dinner. The 857, still being "on", cycled off and on again but...the frequency had changed and the receiver sensitivity was nil. No receive capability existed on any band and transmit was also non-functional.

Luckily, I stay with a ham friend (Bill, W4IPB and his wife) and that gives me quite a bit of flexibility in terms of keeping early morning radio schedules from Bill's shack and having Internet access. I checked one of the rig modification web sites and discovered that a hidden menu existed in the 857. The menu is utilized for factory set-up and controls a multitude of parameters from receive and transmit gains to ALC points. After checking the values of my hidden menu memories, it became evident that they had all apparently been reset to their pre-test values. These values

would be different for different units. Egad!...the remainder of the vacation and my trip home was without ham radio!

A Prudent Course of Action

I placed a call to the Yaesu service department. They told me that had not seen this particular situation before. I can confirm that I had similarly manipulated DC power to the rig many times previously and had never seen this result. Unfortunately, Yaesu does not keep records by serial number of the settings. The unit would have to be returned to the factory for recalibration.

I wholeheartedly recommend that anyone who owns these transceivers make a list of the hidden menu parameters and the exact settings for each. In the FT-857 there are 74 menu items. Accessing the hidden menu is accomplished, with the unit "off", by holding down all three soft keys (A, B and C) while turning the unit on. Access each memory item by turning the "SELECT" knob. Make a note of each memory number and the associated value. (You may also make note of each alphanumeric descriptor.) DO NOT CHANGE ANY VALUES! Turning the fine tuning knob will change a value. To return the unit to the normal mode, push the "FUNC" button.

I now have the recorded list in my manual documentation with a copy in my automobile. Should the problem re-occur, I will now be prepared to re-enter the values and eliminate a lengthy off-air period.

Corroborating information on this issue may be found on the www.mods.dk website.

Happy hamming!

Ham Radio Operators Join Up to Help ILL Man

by Melodie Martin, Time-Dispatch Staff Writer

April 13, 2005

As he often did while driving, Jerry Williams chatted on a ham radio mounted in his pickup truck after running errands Thursday evening. But within an hour, familiar rag chewing among amateur radio operators would turn into a coordinated effort to save a man's life.

Needing to stop by a home-improvement store before heading to his Mechanicsville home, Williams wrapped up a conversation with fellow hams on a Richmond-area repeater frequency. But then something on the air caught his attention.

"I heard this fellow call in and wanted to know if anybody was going to be on the repeater in about an hour," Williams said.

Sensing something unusual about the request, he picked up his radio microphone and answered the man.

"He said, 'I'm on my way to the VA hospital from

(Continued on page 9)

(Ham Radio Operators Help continued from page 8)

Lynchburg," Williams recalled. "He said he had a personal monitoring device on him indicating he had some kind of blockage in his heart and his doctor had told him to report to the emergency room."

Williams told the man to pull over while he and the other radio operators summoned an ambulance. The man agreed to park his car at the Virginia State Police's Appomattox field office up ahead.

Earlier that day, 60-year-old Kenneth Wallace's heart-monitoring device indicated there was a problem. His doctor advised him to go to a Lynchburg hospital, but Wallace, unaware of its seriousness, decided to drive to Richmond instead.

Wallace, a retired police officer and Army veteran, was diagnosed with anxiety-related heart problems 15 years ago. Divorced and with no family in Lynchburg, he was used to making the 130-mile trip alone to Richmond's McGuire Veterans Affairs Medical Center.

But as he was driving west on state Route 24 just past the town of Appomattox, he began to feel dizzy, faint and flushed. His heart was fluttering.

That's when he picked his ham-radio microphone and made a call for help.

Back in Richmond, Williams took down Wallace's medical contact information and tried to pinpoint his location. Three other hams -- Marie Long, Joseph "Tray" Murphy and Phil Davis -- got on their telephones and tried to reach state and local police in Appomattox and Buckingham counties. Another, Greg Curti, used large antennas at his Hanover County home to listen to Wallace's fading signal.

As Buckingham County sheriff's deputies looked for Wallace's white 1994 Chevrolet Corsica, Williams kept Wallace talking on the air. He wanted to keep the sick man's mind off his condition. He also wanted to be sure Wallace was still there.

"I never let him stop talking. I made him keep answering questions. I'd ask him three times in a minute, 'Where are you now?' just so I would know he was there," Williams said.

Wallace, who does not have a cell phone, said Williams' on-air presence was comforting.

"I was scared," Wallace said later from his home. "I was thinking if I had to do it all over again, I would have called the rescue squad. But Mr. Williams got me through it."

An hour after his initial radio transmission, Wallace saw blue lights. A Buckingham sheriff's deputy got on the amateur radio and assured Williams and the other Richmond hams that a rescue squad was on the way. Williams gave the deputy instructions from Wallace's doctor, including things that needed to be taken from the car.

The next time Williams spoke to Wallace would be at the VA hospital Friday evening.

A ham-radio operator for 42 years, Williams said it


was his first such experience. He is president of the Richmond Amateur Telecommunications Society, a ham-radio club that supports and operates the same radio repeater Wallace used to seek help.

"This was the first situation where you were directly involved with somebody whose life was really kind of on the edge and you were able to make a difference for him," Williams said.

As the two shook hands, a teary-eyed Wallace held on tightly.

"If it had not been for Mr. Williams and all of the other amateurs, it never would have gotten coordinated," Wallace said. "That radio is a lifesaver."

Contact Melodie N. Martin at (804) 649-6290 or mmartin@timesdispatch.com

Jerry is an ECARS member, 4780, and is the president of the Richmond Amateur Telecommunications Society (RATS) a local club, operating on 146.880. 

ECARS Spring Meeting Photos



ECARS Members at the Spring meeting: last row L to R, Al, KA3UNB, Dave WA3GIN; middle row L to R, Ray K3RIZ, Joe N3YW, Peg N3YT, Don WA2OCL, Bob N2RXX; front row L to R, Bob N3ZUA, Alex W3ICX, Bob W3ZEH.



JoAnn N3JRX, and Rachel N1FSU

WB3GVD photos

Higher Antennas NO GOOD for this time of the Sunspot Cycle.

Near Vertical Incident Skywave (NVIS) Antenna

Overview

The Near Vertical Incident Skywave (NVIS) antenna is one that provides the majority of its radiation at an extremely high angle. That is to say the major lobe is between 75 and 90 degrees to the Earth's surface. This will provide excellent omni-directional communication for a distance of 300 Kilometers (186 miles) to 400 Kilometers (248 miles). The maximum frequencies involved will be as low as 2 MHz under very poor conditions to as high as 14 MHz under excellent conditions, with the average being between 3.5 MHz (80-meters) and 7.3 MHz (40-meters).

When I first started looking at the NVIS antenna for "local" communication the consensus seemed to be that it was a dipole-type antenna, near 1/8th wave at the operating frequency, above the ground. If you are running the military, non resonant antennas, that seems like a fair description. The difference is that many, if not most, horizontally oriented antennas have an NVIS component in their radiation.

How then do we determine what NVIS antenna will best suit our needs? The answer to that question is both simple and yet quite complex. Let me begin by addressing specific parameters that have significant effect in antenna performance. Before we get there, let me say that this is information on how to make it work, NOT a graduate degree treatise on the theory of NVIS.

Height above ground

The antenna height above ground seems to be the single most controversial subject in discussion of NVIS antennas. Some say anything below 1/4 wave works. Others say anything below 1/8th wave and yet others - myself included - use ten to fifteen feet as the optimal height. The university in Missoula Montana has posted some NEC modeled comparisons that you can review. You will note that there is negligible difference in antenna gain between 1/8 wave and 1/4 wave height. There is however a significant difference in the logistics of placing an antenna at 70 some feet in the air versus 35 feet in the air. First, let me give you some of the other rationale on why I chose the ten to fifteen foot heights.

The Near Vertical Incident Sky wave (NVIS) antenna is a half-wave dipole antenna mounted not over 1/8th wave above ground (at the highest operating frequency). While 1/8th wave works reasonably well, better coverage is obtained if the antenna is mounted at about 1/20th wavelength above ground. A second advantage of lowering the antenna to near 1/20th wavelength is a lowering of the background

noise level. At a recent S.E.T. communication on 75-meters was started with a dipole at approximately 30 feet. We found that communications with some of the other participants was difficult. A second 1/2-wave dipole was built and mounted at 8 feet above the ground. The background noise level went from S7 to S3 and communications with stations in the 25 and over mile range were greatly enhanced. Simply stated, you want as much of your signal going up as possible and 10 to 15 foot heights has shown to function very well.

I have had many people write to tell me about the results they obtained simply by lowering an existing antenna to the ten to fifteen foot levels. All are consistently amazed at how much better the "local" (less than 300 miles) signals are. Most comment stronger local signals when others are also using NVIS antennas.

A specific example is a friend who lives about 160 miles away, with the Continental Divide between us (many mountains in the 12 to 14 thousand foot elevation). Steve built an NVIS antenna to compare with the G5RV he has at 30 some foot above the ground. The signal reports went up by about 15db. There were no other changes, he just went to an NVIS at fifteen feet and the signal went up considerably. It works!

Any horizontally polarized antenna will have an NVIS component in its radiation. To maximize the NVIS component, you need to run the antenna at 10 to 15 feet above the ground. Will it work if lower? Yes it will, reference WA6UBE tests. Will it work if it is higher? Yes, but the NVIS efficiency goes down. Field tests have proven that maximum NVIS efficiency is obtained at the 10 to 15 foot height for frequencies in the 40-meter to 75-meter range.

Modeling

At a local radio meeting one of the engineers did a presentation on antenna modeling using the NEC software. During the presentation he modeled a 75-meter dipole first in free space, then at one wavelength above ground and then at 10 feet above ground. The software showed that at 10 feet, the radiation pattern closely resembled a round ball sliced in half and mounted at 15 degrees above the horizon. This is a direct correlation to field observations! Man-made noise will tend to be received in the low 10 to 15 degrees above the horizon, thus the lowering of background noise. We have also observed consistent omni directional coverage with the signals from NVIS antennas in the 10 to 15 foot heights.

As mentioned above, there are NEC plots of an 80-meter dipole at various heights posted by the university at Missoula, MT available for your review.

Ground

Yet another consideration is the "quality" of the ground below your antenna. By this I mean the conductivity of the ground over which you are operating. For any given height (1/8th wave length or less) poor conductivity will

(Continued on page 11)

(NVIS continued from page 10)

attenuate up to 3db of your signal as compared to high conductivity soil. A very specific example is the ARES installation in Longmont, CO at the emergency operations center. That antenna is mounted 10 feet above a flat roof. The base for the roof is a grounded steel plate. This antenna consistently performs as well or better than any other in the state. The reason is simple. A full sized resonant dipole antenna mounted ten feet above an excellent ground.

A specific example of how well the Longmont EOC antenna works occurred one Sunday when we were testing the antenna. A friend of mine tried his Yaesu FT-817 running on the internal battery pack. As most know, that configuration produces 2.5 watts PEP maximum output. At that power level we received a signal report from NCS in Colorado Springs (90 miles south) of S9+10db, on 75-meters just before the net started.

Another example of how the conductivity affects signals is from my area where we regularly use NVIS antennas on 60-meters to communicate across the Continental Divide. Doing this on a twice-weekly basis for more than a year, we have established a baseline for comparison. During the week of 9/23/04 we had a slow moving rainstorm that put down more than one inch of rain spread evenly over about 36 hours. For those of you who have 30 to 50 inches of rain per year, that would not seem like much rain. However, here in Colorado that amount of rain is 1/15th of our total annual precipitation. After the rain, under less than optimal band conditions, signals were up 6 to 10db.

Ground mounted Yagi?

One other consideration might be the addition of a "ground" wire positioned to operate as a Yagi type reflector below the driven element. The problem with this configuration is that the recommended spacing is .15 wavelengths or about 34 feet for 75-meters. As noted above, reducing the antenna height from 30 feet to 8 feet reduced the background noise level by 4 "S" units thus while the reflector may increase the efficiency of the transmit signal, it reduces the usable signal strengths of received signals. A received signal of S6 would work fine with the antenna at 10 feet but not be heard with the antenna at 30 feet as in the S.E.T. example above.

Ground wire

Yet another approach is to run a "ground" wire at the surface where the antenna is mounted. A good discussion on this can be found on an Australian website by Ralph Holland. He did some research on 160-meters and found that a ground wire at .02 to .06 wavelengths below the driven element produced the best gain. That translates to about 5 to 15 feet at 75-meters, which would be consistent with the heights that produce the best NVIS performance. Others who I have talked with claim at least a 3db improvement with this approach.

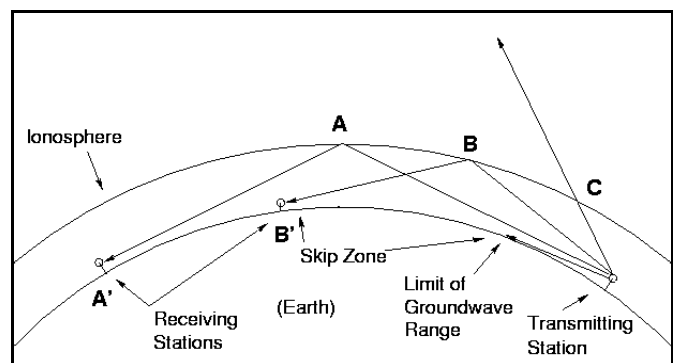
I am just completing some trials with a ground wire

(actually two) under a random length wire antenna. I ran two parallel wires on the surface of the ground, connected to a ground rod at the house end, separated about 12 inches and approximately centered under the random length wire antenna. This configuration produces more than 6 db improvement on the transmit signal and a slight improvement on receive. It is well worth the effort.

I am working on a "ground" wire connected to the mounting bracket for a "Ham-stick" dipole running down the side of the mast. The results of preliminary tests were inconclusive. Even well established antennas were not functioning properly the day I was able to test so I discount the transmit results. I did notice a few interesting occurrences while working with this setup. With a ground wire running from the bracket, down the mast and connected to various lengths of wire laying on the pavement, the resonant frequency of the antenna changed slightly (10 kHz shift) and the SWR varied slightly, from 1.5:1 to 1.6:1 to 1.4:1 - depending on the length of wire below the antenna. The lowest SWR was from a half wavelength long wire 11 feet below the antenna. Gee, does that imply resonant antennas provide a better-matched load?

WA3GIN who also operates a NVIS 40-meters antenna system believes for ECARS NCS operators a NVIS antenna might just be what the doctor ordered for the bottom of the sunspot cycle. "I've had my NVIS in operation for more than three years now. Last Fall I installed a reference full size 40-meter rotating dipole at 60 feet for comparison against the NVIS. Typically, the NVIS outperformed the dipole during the day by as much as 20db (during normal daytime short skip conditions). The NVIS also attenuated the broadcast station signals by an "S" unit or more depending on the time of day. So, put the vertical in the garage, put up a low hanging dipole and get ready for some very interesting 40-meter signal propagation experiences".

Special thanks to Pat Lambert WO1PL who granted us full use of the content from his web page dedicated to NVIS antennas. <http://www.w0ipl.com/ECOM/NVIS/nvis.htm> 🙏



Radio signals bouncing off the ionosphere.

ECARS Monitor
PO Box 5923
Hudson, FL 34674-5923

PRSR STD
U.S. POSTAGE

PAID

MERRIFIELD, VA
PERMIT #6418

The ECARS Monitor is published by the East Coast Amateur Radio Service Inc., for the benefit of its members. Full permission to quote from the Monitor is granted, provided a credit line is used. Members' for sale advertisements are run free of charge. Credit card size commercial ads are accepted at a cost of \$15.00 per issue or \$45.00 per year. Send advertisement information to the editor. The Monitor and ECARS do not assume any responsibility for items offered for sale.

Items for the Monitor should be sent to the editor in Microsoft Word or text format, if possible. The deadline for submissions is the 15th of the month preceding the month of publication, subject to change by the Editor. Publication is in Feb., June, Oct., and Dec. The Editor reserves the right to reject, edit, or modify submitted material as necessary.

Membership renewals, address changes, call sign changes, and new applications should be sent to: **ECARS, PO Box 5923, Hudson, FL 34674-5923.** Membership dues are \$7.50 per year. Make checks payable to ECARS, and put your call sign and member number on the check memo. Multi-year renewals are appreciated. Renewals of three years or more will receive a laminated card at no charge. All membership subscriptions begin upon receipt of dues and terminate on December 31st.

ECARS decals are available for \$1.50 each, and pins for \$3.50 each plus \$.60 postage per pin. Send your payment to: ECARS, PO Box 5923, Hudson, FL 34674-5923.

2005 ECARS Officers

President

John Zorger, WA1STU
5711 Artemus Rd.
Gainsville, VA 20155-1542
Email: zycom@starband.net

Vice President

Bob Schneebeli W3EOP
RR5 Box 5262
Saylorsburg, PA 18353
bobshop@ptd.net

Secretary/Treasurer

Charles Stampf, N2CJ
11646 Wayside Willow Court
Hudson, FL 34667
Email: cestampf@yahoo.com

Net Manager

Joseph S. Reppert WY3T,
Email: jsbrat@early.com

ECARS 2005 Board of Directors

Joseph Blithe, WB3GVD, Email: jblithe@comcast.net
Dave Jordan, WA3GIN, Email: wa3gin@erols.com
Al Prindle, KA3UNB, Email: aprindle@rcn.com

Webmaster: Paul Colin, WA2GRB, Email: ceza@earthlink.net

Public Relations Manager: Mary Popella, N3YL
Email: n3yln3oo@verizon.net

Swap and Shop Manager:
Roger Schroeder, N2LAQ

Monitor Editors: Mike Stone, N1VE, Peggy Burns, K1VE
32 Carriage Road,
Gilford, NH 03246
Email: n1ve@amsat.org