

CALENDAR

May 2
Pedal The Parkway

May 9
Capital To Capital Bikes

May 12
WAARC Meeting

May 16
Jamestown Event

Every Wed 7:30PM
ARES Net

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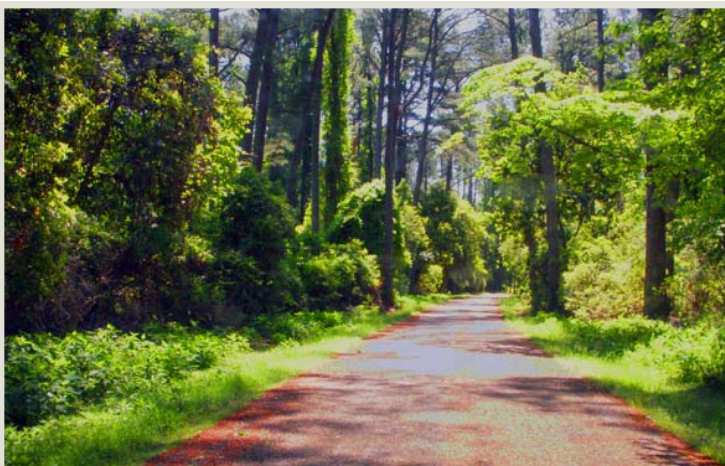
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Short Circuit

VOLUME 3 ISSUE 5

MAY 2009

Special Event At An Island Near You!



Scenic Loop Road on Historic Jamestowne Island..

The Williamsburg Area ARC (WAARC) kicks off the 2009 Special Event season with the Annual Jamestown Special Event on May 16th, 2009. The club members will set up an HF radio station on Historic Jamestowne Island along the James River a short distance from the site of the original fort built by the settlers in May, 1607. They will be operating on several HF bands, especially the 40 and 20 meter frequencies from 10:00 AM until a little after 4:00 PM.

Tom Kirby (AJ4LM) of Williamsburg is the



Riders enjoy a few hours on the Parkway...

18 radio operators provided communications support for the 13th annual Pedal the Parkway, Saturday May 2. The weather report during the week predicted a good chance of showers for some of the

Special Event Coordinator for the club this year. He has arranged the event with the cooperation of the National Park Service who share the operation of the historic location with the Association for the Preservation of Virginia Antiquities. The NPS allows us to put on the event each year as part of our commitment to public service by continuing efforts to maintain our ability to respond to any communications needs in time of emergency. We also help to create interest in the local history as we make con-

tacts with other amateur radio operators around the country and across the seas. Any amateur who contacts us on these events will receive a card confirming the radio contact and may apply for a certificate if he/she contacts us on all three events an a 12 month period. The other events will be held later this summer; one in Colonial Williamsburg and one in Yorktown.

Anyone is invited to visit our stations and may possibly get on the air.

“Pedal the Parkway”

event, but the weather held and was not a problem. Special thanks to Mike, W4NYY who was on the scene for two patients, one with severe

cramps and moments later, another who fell from his bike and sustained scrapes and road rash.

The park rangers and the sponsor-

ing businesses were pleased with the amateur radio support and we'll look forward to doing it again next year.

Radio ops, AI4QQ, AA4AV, W4NYY, KD4NIV, WG4F, KF4WST, K1NUH, AF4QG, K2QIJ, NR4C, N1LO, KC4CMR, KI4SNN, K4GAM, AJ4HA, KB4YFK, KG4SMV, KE4ZPZ

Scene Around Town



Interesting VA State license plate

This photo was sent to me by Chris (KC4CMR). He didn't say where he found this auto, but thought it

might make find it's way into the newsletter. Thanks Chris.

If you find an interesting photo in your collection, please send it to me at

nr4c@widomaker.com and I will try to include it in the newsletter, as space permits. And, it doesn't have

to relate to ham radio. A great scenic view, sunset, or portrait. Just remember that this is published on the club website, so don't send anything that offensive. If I get enough response to this, I might even start a contest and the winner could win a "Free" subscription to the newsletter. Take off those lense caps and locate the memory card for the camera. Please send ".tif" or ".jpg" please. *editor*

May Program



2009 ARRL Field Day Logo.....

Thanks to Randy Pryor (WB7URZ) of Gloucester for the interesting program last month on APRS.

The program as such for May will be "Field Day Planning"

and VP Dave Caywood (W9NNK) will be the presenter. I'm sure Dave will be looking for commitments for many of the services we need for a successful FD event.

Field Day is ARRL's annual readiness exercise and it gives hams a great opportunity to get out and show "Their Stuff". WAARC

typically sets up two stations, one for CW and one for phone. We often set up a GOTA station to allow new or inactive hams to get on the air and have some fun.

This year's FD is June 27-28, 2009 at the Brickyard on Brickyard Rd near Toano.

See you there.....

ARRL EXAMS Big Success



The April Ham Exam was a huge success this year. A total of thirteen people registered to take exams and eight passed their test to get a new license or upgrade. And one upgraded due to his having an existing Technician Plus exam granted before the cutoff date in February 1987.

Congratulations to :

Bernard Abey, Richard Fletchner, Jeffery Phillips, John Stachowiak, Brian Bealer, Heather Oman, Christopher Pasquini, Richard Snow, and William Ayers.

I'm afraid I don't know which of these were in our Tech Class, but thanks go to Dave Wilburn, John Magda and others who assisted with the class.

WAARC holds Amateur Radio Exams twice a year, the first Saturday of April and October. If you or someone you know would be interested in getting a new license or upgrading an existing license, please contact me or Mike Conte for more details.

Meeting Highlights

WAARC April 14, 2009 meeting minutes

President Dave, NM4M, called the meeting to order. There were 26 attending.

Dave called for introductions with a question of your HF rig. There was no member interview this month.

The minutes were approved as posted on the club group site. Ken, NU4I, was unable to attend so Dave gave the treasurers report and a quick recap of news in the amateur radio world.

Chris, KC4CMR, discussed the busy event schedule coming up in April and May. The Cycle 4 Cycle event was scheduled for April 25 (canceled) and the annual Peddle the Parkway event will be held on Saturday, May 2. The Capital to Capital bike event is May 9. There have been some problems with that event at the Richmond end. Also club event plans include the annual Jamestown special event on May 16.

Dave, NM4M, has done some web site updates and welcomed new hams from the latest testing session. Jeff, KJ4LAQ was on hand with his new call and General license after passing both the technician and general tests in back to back weeks. The WAARC ARRL test session produced 3 new general licenses and 6 new technician licenses.

Dave, W9NNK, reported on the first field day meeting and planning, and passed around a "sign up" sheet for those interested in taking part to be able to indicate the days and times they plan to attend.

Bill, NR4C, showed his portable "buddy pole" style antenna that can be put together in multiple configurations for 40m to 2m capability. Chris, KC4CMR, showed a glass jar battery jar and explained how they worked. He hopes to use it at the Norge Train Depot telegraph station reconstruction. Dave, NM4M, mentioned the K3UK web site for finding and scheduling QSOs. You can google it for the url. John, K6OWD, talked about the Elecraft KX1 project QRP rig he constructed.

Randy, WB7URZ, gave a presentation on APRS with John, KB4YFK in the back with his rig all setup and operational. Randy talked about the items involved and capabilities and software and John had his rig send and receive messages. A few of the web sites included:

<http://www.ui-view.org/> and <http://aprs.fi/> and <http://www.openaprs.net/>

The club breakfast was scheduled for Saturday April 18, at 8:30 at the Candle Light.

Respectfully submitted

Dan, WG4F

Please send any corrections or additions to me.

Attendees

AI4QQ	John
AJ4HA	James
Guest	Cathy
K1NUH	Ed
K2QIJ	George
K4SEC	Mike
K6OWD	John
K8LF	Jerome
KB4YFK	John
KC4CMR	Chris
KD4RJP	L.P.
KF4VCF	Jim
KG4SMV	Steve
KI4F	Bob
KI4SAW	Bill
KI4SNN	Paul
KJ4BXU	Kelly
KJ4LAQ	Jeff
NM4M	Dave
NR4C	Bill
W4DMZ	Steve
W4RDJ	Don
W4TMN	Hershel
W9NNK	Dave
WB3O	Wally
WG4F	Dan

Tech Stuff

Bill NR4C

Well, it seems that Ken has taken a small vacation so I'm going to try to fill in for him this month. I know you have enjoyed Ken's "QRP Bench" articles as much as I and I hope you will find something in this one you can use.

One thing we all have to consider when working with ham radio, be it QRP or running a high powered 1.5 KW station, is power. You may use batteries or an AC driven power supply. Either way, you have to control the voltage, and connect it to your radio. I'm going to present three of my recent power projects.

First, I have a device that requires 9 volts DC. I could use a 9 volt battery of course, but I'd rather not be tied to small batteries that will surely be dead when I need them most or am away from any source of fresh ones. If I have my HF radio operating, I will surely have a source of 12 Volt DC power. I decided to build a small, simple 9 volt regulator using one of the small three terminal regulator devices. This being the 21st Century, I chose a L7809, 9 volt, 1.0 A Positive Voltage Regulator From Mouser (P/N L7809ACD2T-TR) This particular part Number is a D2PAK package and is Surface Mount Technology (SMT). Figure 1 shows the manufacturer recommended application circuit. Note the two small caps. I ordered the parts

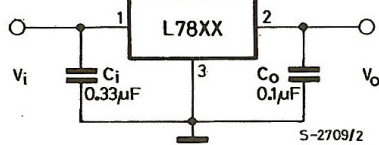


Figure 1, Application Circuit

and began to layout a PC board for the project. In the end, I decided to mix old technology with the new and made

the circuit board using tape to mask the areas I wanted to etch and sprayed the board with black Krylon lacquer to cover the areas I wanted to keep as copper (Photo #1). I then removed the tape and etched the board with Ferric-Chloride. This process removed the small stripes of copper separating the areas that would accept the IC, caps and connecting wires..

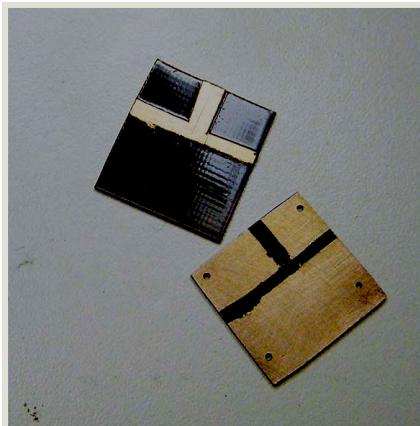


Photo #1: Circuit board with painted resist (top) and tape mask (bottom).

Photo 2 shows the etched circuit board before cleaning with acetone and tinning with solder. I didn't clean it until I was ready to build the circuit to prevent the copper from tarnishing.



Finished PC board and parts. The regulator is in lower right.

I tinned the board with some RS 63/37 solder and a very hot iron. Then I used the same type paste that Ken

used last month for soldering the SMT components. I followed his examples and was very pleased with the results (photo 3)..

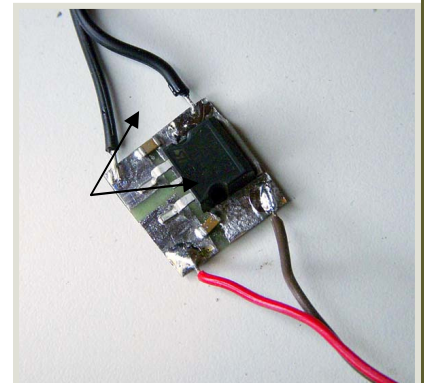


Photo # 3: Completed 9 Volt Regulator circuit. Note the small caps at lower corners of regulator chip (arrows).

This project can be easily copied and there are a great number of different voltages available.

The next part of this article concerns some PowerPole distribution blocks I made for my recent mobile installation. I had wished I had more power available in my older mobile install and I wanted to have plenty of available tap points.

I elected to make two distribution blocks, one to go behind the seats on the 'hump' where it would be mostly hidden when the seats were in the normal position, yet easily available by running the seats forward. For this, I would run an #8 AWG stranded wire from the battery directly to the distribution block. There would be a 40 Amp Auto-Reset Circuit Breaker near the battery. I elected not to use fuses as they can be a source of resistance under load due to dirty contacts especially in the harsh environment found under the hood of an autom-

bile. With fewer connections and under positive pressure, I feel it will show less voltage drop. Photo 4 shows the bottom view of this distribution block. It is made of two pieces of copper clad circuit board with a thin plywood spacer to align the copper surface with the #12 AWG stranded wires crimped into the PowerPole terminals. The copper surfaces were tinned with 63 solder and then the assembled blocks of PowerPoles were slid in place and soldered with a hot iron. The tinned copper braid is the ground return which is connected to

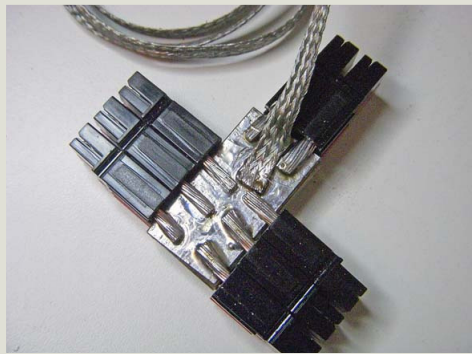


Photo #4: Distribution block negative side, note tinned braid soldered to circuit board

the car at a seat bolt.

The top or positive side is shown in photo 4. The white connector marks the input so I don't unplug it by

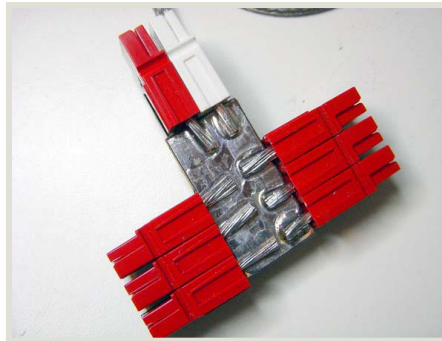


Photo #5: Positive side of distribution block.

mistake. The open areas were filled in with a piece of balsa wood and glued. The whole assembly was Hot Glued to a piece of aluminum and bolted to the floor of the car.

The other distribution block was made to mount in the rear area of my Taurus Station-wagon. For this, I used a mount made by Anderson which

holds 4 pairs of connectors and mounts in a rectangular hole approximately 1

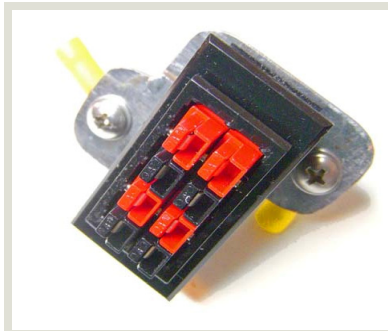


Photo #6: Mounting assembly from PowerWerx

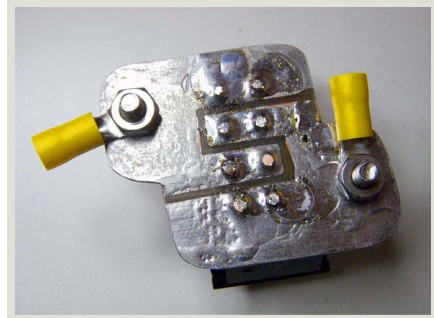


Photo #7: Circuit layout for Power-Pole block.

X 1 3/4 inches. This device (photo 6) is available from PowerWerx (<http://www.powerwerx.com>) and is very reasonable and it includes all the PowerPole parts to boot. Again, I used a circuit board using paint as a resist for etching. And again, #12 wire was used to make connections to the circuit board.

So far this system has proved to be very capable and flexible. The measured voltage drop operating at 50 watts in VHF was a mere 0.2 V.

That's about it for now, and I'm sure

WAARC DUES\$ are DUE!

Last year the club made some mods to the By-Laws and one of them was to move the club fiscal year from January– December to March– February. Therefore, this year we got a break and our dues weren't due until the first of March. So, our treasurer has asked me to remind everyone that dues are due NOW!

If you have not paid yet, please see Ken at the April meeting or mail a check to :

**WAARC
PO Box 1470,
Williamsburg, VA 23187.**

Ken also mentioned that of the 49 members of last year, we have more than half already paid for this year.



We're well on the way to another great year.

Editor

Pedal The Parkway PIX

Bill NR4C and Jim AF4QG



Photo 1: A family takes a break during the Pedal The Parkway event, May 2, 2009.



Photo 2: A bike Rodeo was held at the Jamestown end of the Pedal The Parkway event..



Photo 3 AA4AV Bike Mobile mount.....



Photo 4 Addison (AA4AV) is an avid Biker



Photo 6 WAARC Treasurer, DAN (WG4F)



Photo 5 Couple enjoys a leisurely ride on the Colonial Parkway.

Williamsburg Area Amateur Radio Club

WAARC
P. O. Box 1470
Williamsburg, VA 23187
E-mail:
nr4c@widomaker.com



WAARC Officers

President:	Dave	NM4M
V-President:	Dave	W9NNK
Secretary:.....	Dan	WG4F
Treasurer:.....	Ken	NU4I
Member At Large	John	K6OWD
Newsletter:.....	Bill	NR4C
WEB:.....	Dave	NM4M
Spec. Events	Tom	AJ4LM
Photographer:.....	Jim	AF4QG

The Williamsburg Amateur Radio Club serves the Greater Williamsburg (Williamsburg/James City/Upper York County) on Virginia's lower peninsula. The club meets once a month on the second Tuesday at the Library in Norge, Virginia. The group meets for Breakfast on the third Saturday at 8:30 at the Candlelight Grill in Norge. There is a family 'dine-out' on the fourth Thursday at 6:30 PM. The location for this activity varies so check with amateurs on the 146.76 repeater for location.

An ARES net is held each Wednesday at 7:30 PM on the 146.76 repeater. All are welcome.

When all else fails... HAM Radio

<http://k4rc.net/>

Editor's Comments

First I'd like to apologize for being late with this newsletter. I got caught up in some activities and just couldn't make my May 1st deadline. So I decided to wait for results from "Pedal the Parkway" and include some photos. I hope you enjoy them. I want to thank Jim AF4QG for some of the photos and wish I had more from other parts of the event.

I did a search on the FCC database for Active licensees with regular or vanity calls who receive mail at a Williamsburg address. How many do you think there are? Forty-seven, one hundred, one hundred fifty? Higher, there are 247 hams listed in the Williamsburg area. We have about 40 to 50 in the club. Where are the other 200 hams on the second Tuesday of each month?

We need to find these hams and

get them out to an event, or a club meeting, or on the air. How can we do this?

We need to get the word out to the general public about what we do. WAARC is our club, and we are and should be proud of it. Our officers work to provide us with interesting meetings, special events and other activities. We put License manuals in the local libraries. We have a reflector, but it's not used very much. And we have access to some of the finest repeaters in the state right here in 'history city'.

Look up the search as I did and look at the names, you might find a friend, co-worker or neighbor who is a ham and might like to become part of WAARC. Get out a dig up some new members, (well not literally).

We just had a test session and

made several new hams, did we try to get them to join?
Let's bring in some new blood.

Editor....bill NR4C.

Meeting Agenda

- Introduction
- Prez Time
- What's new in Ham Radio
- Minutes
- Treasurer
- ARES
- Publicity
- Newsletter
- Field Day
- Programs / Website
- Special Events
- Homebrew Review