

# KEYKLIX



## MERIDEN AMATEUR RADIO CLUB

### SEPTEMBER 2015

BUSINESS MEETING, THURSDAY SEPT. 10, 2015, 7:30 pm,

ACTIVITY MEETING THURSDAY SEPT 24, 2015, 7:30 pm,

ALL MEETINGS ARE AT 7:30PM ON THE 2ND & 4TH THURSDAYS OF THE MONTH,  
UNLESS OTHERWISE POSTED,

AT THE COOK HILL FIREHOUSE / MEDICAL RESERVE BLDG, 37 HALL ROAD, WALLINGFORD

PRES W1KKF BILL WAWRZENIAK VP N1API AL KAISER SECT KC1AXJ STEVE ALLEN TRES KB1HCC HAGGIE WINSLOW  
S.A.M. KC1ACN ROB CICHON

EDITOR DAVE SWEDOCK K1WJL CONTACT DSWEDOCK@SNET.NET OR 203 235-8582

#### W1NRG conquers & claims Island in North Farms Reservoir

After months of logistical planning, the amphibious assault on the North Farms Reservoir Island took place and the W1NRG "Delta Force" laid claim to the island, now officially labeled as CT-035L. A well written synopsis of the days events by Steve KC1AXJ is included along with some great pictures. Congrats to all involved for a great job.

#### Business meeting

September Business meeting will convene on Thursday Sept 10, 7:30pm at the Firehouse. Interesting and stimulating discussions will take place on the W1NRG Station Construction Chronicles, Club Rig, Club Antenna, Trenches to the antenna's, Club Scholarship, Ceiling Paint etc. Dont Miss It.

#### Activity Meeting

The August planned activity was Solar Panels fore the home(K1PU's) by Mark K1PU who unfortunately was out of town on business, no word yet as to whether he will try again this month?

#### New Treasurer needed

President Bill W1KKF announced that Haggie KB1HCC has asked to be relieved of his duties due to personal reasons. Anyone interested contact Bill W1KKF

#### W1AW Station Operation by the MARC on Saturday Sept 26

Paul K1SEZ reports There are two ICOM 7700s, one Yaesu FTDX5000, a Kenwood TS-590, and a FLEX 3000 in the three operating booths at W1AW. With the patch panel, Joe Carcia (station manager) can hook up any of the station's antennas to any rig. I urge anyone not familiar with the IC 7700 to do some "homework" via the on-line manuals about running these beauties (which are the most popular "seats" at 1AW). All the positions have access to a KW amp if desired. Headphones and paddles are available at each rig, and logging is done with a computer keyboard for QSL purposes. I suggest that we start a conversation with the troops intending to come about bringing a copy of their ham license, and perhaps work out some preliminary schedule before hand. Between 10 am and noon time, 40 m, 20 m, and maybe 15 m should be good for some DX or USA pileups. Also, should we plan on going to a local restaurant for lunch at 1 pm in the vicinity? There's a great English pub type place close to HQ that offers a nice lunch with a great separate room for larger groups. The "fish & chips" are excellent. The volunteers' luncheons and holiday gatherings are held here. 73, K1SEZ (P.S. Another unnamed Ham also recommended "Hooters")  
Sept VHF Contest

#### MARC welcomes a new member & a former member...

Recently the Club voted to admit Dan Busa KB1ZMK of Meriden (New) and John Hart Jr. K1JTH (former) into the ranks of MARC membership. We welcome them into the club

**MARC Scholarship Proposed Changes by Chair Don KE1AY**

Proposed changes to the Mark Scholarship Fund Guidelines

All parts of the original guidelines remain the same with the exception of the following paragraphs and one additional guideline.

1<sup>st</sup> Change to the awards paragraph:

Present wording;

Award(s) of interest from the scholarship fund shall be made to the selected candidate(s) each year upon the recommendation of the scholarship committee. The number and the amounts shall be decided by the committee each year based upon interest earned. The board of directors shall disburse the award(s) at the start of the academic year to the candidate(s). The treasurer shall notify the committee by February 1<sup>st</sup> as to the amount of monies to be awarded.

Changed to

Award(s) of interest from the scholarship fund shall be made to the selected candidate(s) each year upon the recommendation of the scholarship committee.

The number and the amounts shall be decided by a vote of the membership at the November business meeting based upon funds available/or interest earned by the fund. The award shall be at least \$250.00 or the amount of dividends receive by the fund The treasurer shall notify the committee by November 1<sup>st</sup> as to the amount of monies to be awarded. The board of directors shall disburse the award(s) at the start of the academic year to the candidate(s).

2<sup>nd</sup> Change Present wording:

Must be in an accredited institution beyond high school and hold a valid amateur radio license.

Transcripts should be attached

Preference to students in electronics or related fields.

Changed to:

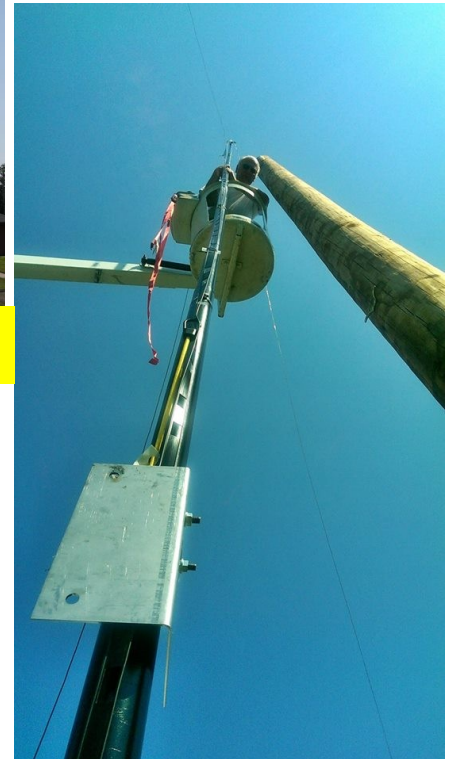
Must be in an accredited institution beyond high school and be enrolled in a stem tract of a curriculum in high school.

Transcripts should be attached

Preference is given to students in electronics or enrolled in one of the STEM fields of study.

New addition:

Each year the scholarship program shall rotate between the towns of Meriden and Wallingford, Ct. One or more students in that town shall be awarded a scholarship based upon the number available. Commencing in the year 2016 awards shall be offered in Wallingford and continue in even numbered years. Meriden schools shall have the opportunity to compete in the odd number years commencing in 2017.



**G5RV BEING INSTALLED ON THE NEW POLES BY K1LYP IN THE CHERRY PICKER AND A CERTIFIED GROUP OF WATCHERS. PIXS BY KC1AXJ**





## 2015 W/VE Island QSO Party de KC1AXJ

On Saturday August 29, 2015 the MARC participated in the 2015 W/VE Islands QSO Party. The island the club operated from is the patch of land in the middle of North Farms Reservoir (the body of water that is next to Route 68 near exit 15 of Route 91). Operations were roughly two hour shifts that started at 8AM and concluded at 4PM. Logistical support for the assault on the Island was Haggie (KB1HCC) and the group of operators were: John – N1GNV, Steve – KC1AXJ, Jim – N1ZN, Rob – KC1ACN & Bill W1KKF.

Rowing to the island from the 'boat ramp' was no easy task. This body of water is filled with weeds and lily pads. Once you stuck your oar in the water you'd swear someone was trying to tug it out from your grip. John and I made the first trip to the island at 8am for station set up and to start making contacts. Navigating around and through weeds and shallow areas was challenge but we made shore by about 8:40am and started setting up. Neither John nor I had dry footwear, getting on shore required wading through 5 inches of water getting in and out of the boat.

The island was really a great place to set up camp. There was clearing about 30 feet from shore that was level and bug free. We opened up the folding table and started putting up the 20m dipole and vertical antennas. John had a 33 foot fiberglass pushup pole that hoisted these antennas to a good working height. We stretched the ends of dipole out and ran it NE-SW with the feed point atop the fiberglass pole and ends stretched out NNE-SSW. The vertical had three radials tied off in somewhat of a delta pattern. The trees offered great places to hang the tie off points and within 20 minutes both antennas were up. Next came connecting the LDG tuner, ICOM-7000 radio and battery. Powering the equipment were two 12V batteries (used one at a time). By a bit after 9AM all was set up and checking out operation began. Everything worked fine and we started to hear some activity on the band.

The first contact was made at about 9:20am. There was a lot of activity coming out of Kansas. The Kansas QSO party was this day as well. The first QSO I made to an operator in Cheshire (from memory, I think that is correct). We got a pretty bad signal report. Then John (K1VDF) made contact with us and he too stated he could hardly hear us and AI (N1API) reported to VDF that he could not hear our station. Hmmm, we can everyone but they can't hear us.... John reached over, looked at the RF power out and realized we were running at 5W. John upped the power and people started hearing us. I made about ten contacts while operating. Operating the rig out in the open in the woods was a lot of fun. The weather couldn't have been any better. I continued to operate until we got the 'call' on the HT that Jim (N1ZN) was ready for his trip to the island to operate his shift. I relinquished control to John for rig operation and I started by trip back to the mainland so Jim could row his way out to the island.

Arriving on shore I passed the oars off to Jim for his journey to the island. The operating team continued through the day and within a few hours made our 25 contacts with two DX contacts, so we no longer had to call our patch of land "New Island, North Farms Island, Connecticut", but rather we could use the official designation of 035L. At the end of the event we had logged 62 QSOs.

By 4PM I heard some activity on the local 360 repeater and the station was breaking down operation and returning to the mainland. Haggie and I awaited KKF and GNV return then assisted getting all the gear back to the vehicles and the boat tied back onto Haggie's truck.

This was truly an adventure and a lot of fun. Thanks go out to all who organized and helped out with this activity and participated in the event.

73, Steve – KC1AXJ





**THE MARC DELTA FORCE AMPHIBIOUS SEAL TEAM#1 LAY CLAIM TO CT-035L**



**NEW POLES AFTER BEING INSTALLED BY THE TOWN**





## A K1WJL Profile by Bob WB1GYZ

Dave Swedok, K1WJL earned his Novice class license at the age of 14 in 1962 after being mentored by Mike Buczek K1JMV and given Novice Exam by Frank Darmofalski, W1FD. though he had already taken the initiative to learn code by listening to code practice phonograph records. His original equipment consisted of a Hallicrafters S-38E rcvr and a Globe Chief Deluxe xtal ctrl 70W xmtr. A longwire antenna ran the length of the kitchen and out into the backyard.

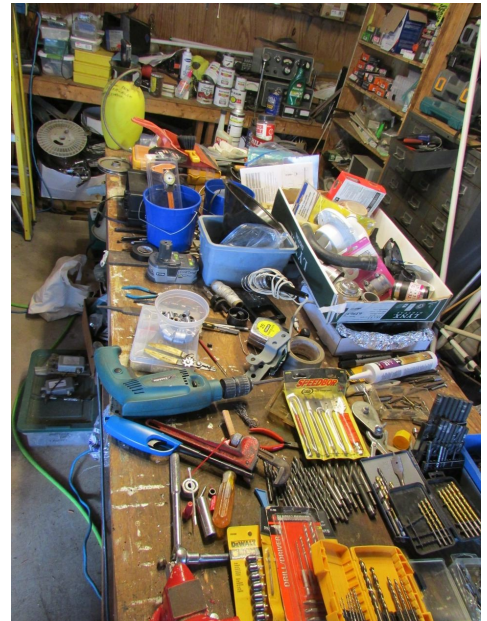
He made General in '65 and upgraded his equipment to a Johnson Viking Valiant II 200W AM xmtr, Mosely CM-1 rcvr, and a homebuilt SB-400 xmtr. About 1966 he built his first cubical quad antenna using bamboo for the 10 and 15 meter band. He liked the quad so much that he eventually built a "monster quad" with 4 elements on 20 and 15 meters, and 7 elements on 10. He took photos during construction and would be happy to show them as a slide show for an activity meeting, if there is enough interest. In 1969 Dave became involved in contesting and DXing, and in '85 was awarded #1 DXCC by working every country on the air. There were 326 countries back then, which netted him 326 postal QSL card confirmations. In 1988 Dave switched his main antenna to a KLM KT34XA, his first non-quad antenna. He was pleased with its performance over a ten year span, but unfortunately, it was destroyed by an ice storm. As a parallel to his hobby, Dave attended Wilcox Tech. School and Industrial Electronics Program from 1961 - 1965 where he learned basic electronics and became President of their radio club. From 1965 to 1967 he attended Hartford State Technical College and earned a degree in Electrical Engineering, after which, began employment with Canberra Industries working in the nuclear detection department. In 1969 he worked at the nuclear structure lab at Yale University as a Nuclear Electronics technician, and then opened Swedock Communications Lab, where he repaired commercial two-way radio equipment. Not about to rest on his laurels he then taught electronic courses at P&W, followed by his desire to open a ham radio store in Meriden, which later became known as Rogus Electronics. In 1980 he began a career teaching electronics at Goodwin Technical School in New Britain for 22 years, rising to department head. He also returned to College to attain his Bachelors in Vocational Education. In 2002 Dave retired and now has more time to devote to the hobby that proved so instrumental in giving him such a varied electronics career. When asked about the direction the hobby is going, he confided that he sometimes longs for the old days of simple operating...before computer interface.



**K1WJL CIRCA 1964**



**CURRENT OPERATING STATION**



**WORK BENCH, NOTE COLLINS S-LINE ON REAR BENCH**



**40 METER TUNED VERTICAL WITH 15 TUNED RADIALS, LOADS UP ON 40-10 WITH TUNER--KILLER ANTENNA!**



**TOWER ALMOST READY TO GO BACK UP**

### **EDITORS NOTE:**

**THIS ARTICLE WAS THE RESULT A PERSISTENT WB1GYZ SHOWING UP AT MY QTH WITH CAMERA IN HAND AND A NOTEBOOK. I WOULD HAVE PREFERRED TO HIGHLIGHT OTHERS....SO PLEASE LET BOB DO HIS THING AND VISIT YOU... EDITOR**

## Secretary Report & Minutes of Meriden Amateur Radio Club (M.A.R.C.) August 2015

The business meeting opened at 7:29 PM EDST on August 13, 2015 with 19 people in attendance and one guest. Officers present: Bill (W1KKF), Al (N1API), Haggie (KB1HCC) and Steve (KC1AXJ).

The meeting was opened and chaired by President, Bill (W1KKF).

**Announcements** – The next meeting, an activity meeting, is August 27<sup>th</sup>. Mark K1PU will detail his solar power home at this meeting.

Many thanks to Rob (KC1ACN) for getting new storage cabinets for the club. These new cabinets lock.

**Special Guest** – Ernie St. Amant (Civil Defense director for Wallingford) gave a 20 minute talk on projects with town and our club. There are two projects that will be worked on within 60 days. Project One: The radio room is now approved as such (upgraded from a 36" x 15" closet!). There will be counter tops installed and will be used for our use. A 36 inch area will be set aside for CD director use but the rest of the room is for MARC use. Project Two is conduit installation from antenna telephone poles to the building. The building will be under a small renovation shortly, consolidating the two bathrooms to a single unisex bathroom with showers. The couch area will be renovated to more living room look and the kitchen will be renovated. The garage area will also be renovated to enable a 22 bed temporary emergency shelter. The radio room will be locked with keypad style lock. A request to keep the building clean, locked and lights off when we leave the building.

**Introductions** – All in attendance introduced themselves.

**Secretary's Report** – July's Secretary's Report was published on the W1NRG site and is recorded as read.

**Treasurer's Report** – Reviewed at meeting and accepted.

**Contributions** – One club member paid dues (see correspondences), two new members added at this evenings meeting.

**Correspondence** – Mutual fund financial report and one member's dues.

**Program & Entertainment** – The club is still searching for a replacement for Rich (WA1TRY) for the Program & Entertainment chairman.

**Scholarship** – A vote was to take place tonight based on changes to the scholarship guidelines for candidate selection. That information was to be in KK but didn't make it to publication. For reference the scholarship changes are:

- STEM related
- Minimum 3.75 GPA required
- Community service
- Need based

Rotate each year between Wallingford and Meriden.

**Club Station & Facilities** –

Grounding for radio room was discussed. Town projects at the club house.

**Club Activities & Program (the 4<sup>th</sup> Thursday of the month)** –

Next meeting is August 27<sup>th</sup> where K1PU will present his solar powered home.

**Nets** –

10M – 10 to 12 check in's this past week.

6M – 6 to 8 this past week.

2M – a handful of check in's this past week.

**Castle Craig** –.

Summer QSO party was first weekend in August. Al submitted application for 1800 bar for the club and waiting receipt. Received PDF certificates for the Spirit of 76 contest, these are on the club laptop.

**Hamfests** –

In a few weeks the Nutfest Hamfest group will have another meeting. We should have a contract with hotel this week.

**Key Klix** –Published, great job Dave (K1WJL). Need folks to send in information for Dave to publish. Bob (WB1GYZ) is asking for volunteers for Bob to come and interview you at your shack for publication in KK. A show of hands had 8 folks at this meeting. These interviews will appear in KK.

**Membership** –

6 members from 2014 that have not paid dues were removed from the roster and will not receive KK in the future. Current club roster membership is 55 member + 2 lifetime members and 1 complimentary membership for a total of 58 members in good standing. Two applicants this evening (K1JTH – John Hart, KB1ZMK - Dan Busa) both accepted to the club this evening. This brings the total membership to 60.

**Interference and Technical** –

No problems reported

### Repeater –

The treasurer of the repeater (Mike Ash - K1LHO) reported the bank has charged service fees due to banks being sold and policies changed from old bank to new bank (Wells Fargo). Mike is working on getting the money out of this account back into the club account.

### Instruction & Testing –

Nothing discussed

### Candy Store –

Hats are still available - \$10 each.

### EmComm –

Chris (WA1VXH) reported the next event would be the Fishbein/YMCA Road Race on Saturday September 19, 2015.

### Misc Old Business –

Firehouse antennas – Town will start work very soon on the projects that Ernie described. The fiberglass pole with the G5RV will be placed on the middle telephone pole this weekend.

Operate W1AW – Paul (K1SEZ) needed a date to bring to ARRL for the club to operate W1AW. The club voted on September 26 as the date. Bill (W1KKF) will let Paul know of this date selection. This date is also the CQ RTTY contest. Does W1AW operate RTTY?

### New Business –

Book Club Christmas party – First choice is Brothers Restaurant assuming same costs as last year. Date would be Thursday December 10.

Sign-up sheet for the US Islands Contest (US Islands Award Program) for August 29<sup>th</sup> from 8AM to 11PM local time. The Island W1NRG will tentatively operate from is the North Farms Reservoir Island. We need to make 25 contacts with 2 DX contacts. Bill (W1KKF) will reconnoiter the Island next week with a small boat to see what we are up against. Let Bill know if you want to participate. Our operate times will be daylight hours. If we do this our club will be designated for this Island forever. Look this contest up on [USISLANDS.ORG](http://USISLANDS.ORG) .

### Meeting was closed at xx PM

### Meeting Attendees on August 13, 2015

Call Sign	Name
K1JTH	John Hart Jr.
K1LYP	John Yusza
K1VDF	John Blevins
K1WJL	Dave Swedock
KB1FYL	Robert W. Carruthers
KB1HCC	Jonathan Winslow
KB1JL	Eric Olson
KB1ZMK	Daniel Busa
KC1ACN	Rob Cichon
KC1AXJ	Stephen Allen
KE1AU	Robert Kaczor
N1API	Al Kaiser
N1ZN	James Savage
W1CTN	Dave Arruza
W1DQ	John Elengo
W1KKF	Bill Wawrzeniak
WA1VXH	Christian Sievert
WA1ZVY	Tony, Jim Martin
WB1GYZ	Bob Biancur



# Secretary Report & Minutes of Meriden Amateur Radio Club (M.A.R.C.)

## July 2015 Activity meeting

The activity meeting opened at 7:30PM EDST on August 27, 2015 with 18 people in attendance and one guest. Officers present: Bill (W1KKF), Haggie (KB1HCC), Al (N1API), Steve (KC1AXJ).

The meeting was opened and chaired by President, Bill (W1KKF).

Mark (K1PU) was to be the guest speaker; topic was to be Mark's solar house. Unfortunately Mark didn't make the meeting so we'll be pushing this topic out to a future date.

### Announcements –

**Treasurer** – Haggie (KB1HCC) wishes to retire from the role due to other personal commitments. The club is looking for a new treasurer. Haggie will help with the transition to the new person.

**Wallingford Repeater Association** – Mike Ash (K1LHO) reported on the checking account issues with the current bank. The problem manifested itself due to the bank changing ownership many times over the years. In short, Mike is in process of closing out the WRA checking account. At the September business meeting a motion and vote will be held on disposition of these funds.

**Christmas Party** - Brother's restaurant is booked for this year's Christmas party. Date is December 10<sup>th</sup>. Drinks at 6PM and Food at 7PM. This will be the same menu as last years' party.

**ARES Swearing in** - September 17 at Wallingford Town Hall (The big room) for all ARES folks for swearing in ceremony by the Mayor from 6PM to 7PM. This swearing in is required yearly, so if you did this last year you'll need to attend this ceremony as well. This basically covers you and the town in the event you are injured while working/deployed for the Town of Wallingford EOC/ARES/MRC.

**US Islands on the Air** – The following folks will be working the event from North Farms Island on 20m (14.250 – 14.260) for the Club: W1KKF, KC1AXJ, KB1HCC, N1ZN, KC1ACN, N1GNV. We'll be on the air from 8AM to 4PM, so listen up. We are trying to make 25 contacts with 2 being DX contacts.

**Town buildup the shack/antenna etc.** – Chris (WA1VXH) reported that Ernie plans to have this first year phase of the buildup done by October. This includes trenches and conduit from the poles to the shack. The measurements have already been made by the town for this. This is a multi-year project, so what we have by October will not be the end of the build. The town plans to continue this refining of the EOC over several years.

**Taste of Wallingford** – October 3<sup>rd</sup> and 4<sup>th</sup>. Ernie is trying to set up a tent with Fire – MRC – MARC. The following folks volunteered to be at the event: Paul (K1SEZ), Chris (WA1VXH), Mike (K1LHO), Eric (KB1JI), John (N1GNV). The goal is to have a radio set up and literature at the tent. Looking for others to help out, let Chris know if you can be at the event.

### **Meeting was closed at 8:05 PM**

### **Meeting Attendees on May 28, 2015**

Call Sign	Name
K1LYP	John Yusza
K1VDF	John Blevins
K1WJL	Dave Swedock
KB1FYL	Robert W. Carruthers
KB1HCC	Jonathan Winslow
N1GNV	John Bartscherer
KB1JL	Eric Olson
KB1ZMK	Daniel Busa
KC1ACN	Rob Cichon
K1LHO	Mike Ash
KC1AXJ	Stephen Allen
K1SEZ	Paul Ciezniak
N1API	Al Kaiser
N1ZN	James Savage
W1DQ	John Elengo
W1KKF	Bill Wawrzeniak
WA1VXH	Christian Sievert
WA1ZVY	Tony, Jim Martin
Guest	Dave Johnson



## INFORMATION PAGE

# MERIDEN AMATEUR RADIO CLUB

PRESIDENT—W1KKF BILL WAWRZENIAK  
V.P.—N1API AL KAISER  
SECT.—KC1AXJ STEVE ALLEN  
TRES.—KB1HCC HAGGIE WINSLOW  
S.A.M.—WA1TRY RICH AUBIN

MEETINGS:  
7:30PM ON THE 2ND & 4TH THURSDAYS OF THE MONTH, UNLESS  
OTHERWISE POSTED,  
AT THE COOK HILL FIREHOUSE/MEDICAL RESERVE BLDG,  
37 HALL ROAD, WALLINGFORD

KEY KLIX EDITOR DAVE SWEDOCK K1WJL  
CONTACT DSWEDOCK@SNET.NET  
203 235-8582

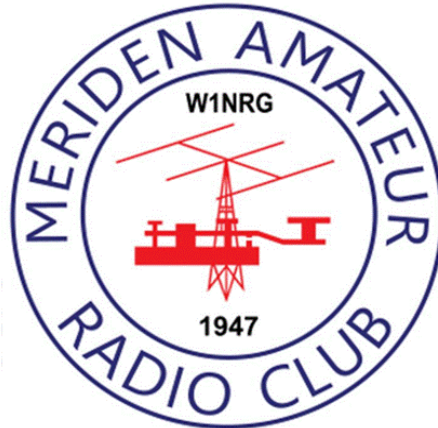
### CLUB NETS

6 MTR NET MONDAYS 8PM  
50.175MHZ N1ZN JIM

2 METER NET TUESDAYS 7PM  
147.36 /RPT K1TDO TODD

10 METER NET TUESDAYS 8PM  
28.375MHZ K1VDF JOHN

10/10 CASTLE CRAIG CHAPTER  
CONCURRENTLY WITH CLUB NET  
28.375MHZ TUESDAYS 8PM N1API AL



### WEBSITE:

[WWW.W1NRG.COM](http://WWW.W1NRG.COM)

### FORUM/BBS:

GO TO [WWW.W1NRG.COM](http://WWW.W1NRG.COM)  
AND FOLLOW THE LINKS

### CASTLE CRAIG 1010 WEBSITE:

GO TO [WWW.W1NRG.COM](http://WWW.W1NRG.COM)  
AND FOLLOW THE LINKS

CLUB REPEATER W1KKF/R  
147.36MHZ +600 OFFSET  
NO PL TONE (OPEN REPEATER)

## MARC MEMBERS

AB1HB	Charlie Dudac	N1API	Al Kaiser
AF1HS	Art Fregeau	N1BF	Patrick Dionne
K1IIG	Steve Tripp	N1GNV	John Bartscherer
K1JTH	John Hart, Jr.	N1GY	Geoff Haines
K1LHO	Mike Ash	N1LGH	Barbara Stone
K1LYP	John Yusza	N1NAN	Helen Spokes
K1MVM	Mike Macri	N1OKF	Bob Parisi
K1PU	Mark Mokoski	N1VTE	Sarah Kaczor
K1RJC	Rick Castaldo	N1ZN	James Savage
K1SEZ	Paul Ciezniak	NY2HF	Dennis Lane
K1TDO	Todd Olsen	W1ATV	Walt Yatzook
K1TG	Roger Kuchera	W1CTN	David Arruzza
K1THP	Dave Karpiej	W1DMM	Dan Murphy
K1VDF	John Blevins	W1DQ	John Elengo
K1WJL	Dave Swedock	W1KKF	Bill Wawrzeniak
KA1NXX	Jan Rogus	W1NHS	Fred Ring
KA1SE	Luke Laurentano	W1POP	Fred Liedke
KB1FYL	Robert W. Carruthers	W1SKP	Skip Paquette
KB1GWP	Joseph Rish, Sr.	W1VCU	Nelson Denison
KB1HCC	Jonathan Winslow	W7FUR	William Spokes
KB1JL	Eric Olsson	WA1JKR	John Rogus
KB1MMS	Ronald Slack	WA1TRY	Rich Aubin
KB1SIN	Bill Brooks	WA1VXH	Chris Sievert
KB1TJD	Gaianne Jenkins	WA1ZVY	Jim Martin
KB1ZMK	Dan Busa	WB1GGP	Jerry Sheppard
KC1ACN	Rob Cichon	WB1GYZ	Bob Biancur
KC1AXJ	Stephen Allen	WB8IMY	Steve Ford
KC1BAQ	Joseph Hamm	WV2LKM	Steve Waldmann
KE1AU	Robert Kaczor	WY1U	Tim Mik
KE1AY	Donald Mitchell		
KJ4PV	Gary Bleasdale		