

## Mewsletter of the Riverside Counts Ametteur Redio Association

# THE MONITOR



MAY 2016



Welcome to the Riverside County Amateur Radio Association Newsletter. Our club has been serving the Riverside area for 61 years and we have over 50 members. Monthly meetings are held on the second Thursday of each month at 7:00 PM in the La Sierra University Church Conference Center directly behind the church located at the corner of Pierce and Sierra Vista, Riverside, CA. See our webpage for directions and more information: www.w6tj.org

RCARA
HAM RADIO
CLUB



ARRL Affiliated Club #1720 Riverside Repeater: 146.880 MHz, -600 KHz offset, PL 146.2 Hz

Please submit your newsworthy articles and suggested publications by the 25th of the month to be included in the next edition of THE MONITOR to Marlene KK6CTX via email at

XMADAMXX@AOL.COM



A reminder that yearly dues are now payable. Ed Morgan KF6BNQ (Membership Chairman) will be happy to receive your renewal application and check. Contact info:

Phone: (951) 689-1917 edimorg@aol.com

Names will be removed from the roster and mailing list if dues are not paid. If your information is private and you do not want it published on the password protected Members' Roster on the w6tj web site, please indicate if you still wish to receive Club business emails.

## The next Club Meeting will be on Thursday, May 12, 2016, at 7:00 p.m.



Your RCARA Vice President drew a blank in getting a program for this month's club meeting. Our Backup program is presented by **you**, our members!

We'll ask each one of you to tell us about your latest amateur radio activity:

- Have you operated any CW DX, VHF/UHF SSB simplex FM or contest?
- Do you have a favorite kit you built, home brew antenna or other station equipment?
- Have you bought any new gear, even if you can't yet program in the club's repeater or simplex frequencies?
- Have you set up your dual band hand held, mobile or base station for cross-band repeat?
- Do you have some old equipment for a show and tell session?

Well May is the month to shine and help with the program at our general membership meeting. Please come prepared with pictures, gear or sketches and talk away!



### RCARA Club Officers for 2016



- President: Ron Braley KE6RYX (951) 369-5149
- Vice President: Don Williams KD6UVT kd6uvt@arrl.net
- Treasurer: Jim Wiley AG6EA jameswwiley@att.net
- Secretary: Duane Allen N6JPO <u>d.k.allen@att.net</u>
- Newsletter Editor: Marlene KK6CTX xmadamxx@aol.com
- Membership Chair: Ed Morgan KF6BNQ edimorg@aol.com
- Communications Director: Bob Trujillo KG6NIB –

kg6nib@yahoo.com



## Appointed Club Officers for 2016:

- Club Photographer: Steve Evans AF6HR
- Sunshine Chairman: Art Sutorus AA6CA
- Web Site Administrator: Mike Riiff KA6VPW
- W6TJ Trustee: Don Williams KD6UVT
- Club Historian: vacant
- Field Day Chair 2016: Larry Junker WA6PMY

## President's QSO



#### From the desk of Ron Braley KEGRYX



#### Good Day Everyone:

If you have not heard the news, at the last meeting it was announced that we are now officially a nonprofit organization. This means that now we can receive donations and provide a tax deduction receipt.

Second news item is that the members voted overwhelmingly in favor of the Constitution and Bylaws changes. This will make it easier to conduct business and to make future changes when necessary. My thanks to all that worked on the Bylaws.

Upcoming event is Field day. If you can help with Field Day please contact Larry WA6PMY.

We have a lot of members interested in the Meadows Tower Project. It has been announced at prior meetings that we need a committee to head up this project. Several people have told me they would like to be on the committee. We need someone to step up to the plate and be the head of the Meadows Tower Project. They will be tasked with organizing and developing a plan and to lead the committee in these tasks. If you are up to the challenge, please contact me so that we can get started. Thank you ahead of time for your help.

Looking forward to seeing everyone at the May 12<sup>th</sup> meeting.

73, Ron Braley

Raffle tickets are available for a Yaesu FT60R. The HT will be raffled off at the conclusion of Field Day on Sunday, June 27, 2016. The cost of the tickets is \$2.00 each or 3 for \$5.00



Members are encouraged to each sell 10 tickets to their friends, family and coworkers. Please contact Marlene KK6CTX to obtain your tickets

xmadamxx@aol.com



#### Riverside County Amateur Radio Association

Business Meeting, April 14, 2016

#### In attendance

Ron Braley, KE6RYX, President Jim Wiley, AG6EA, Treasurer Duane Allen, N6JPO, Secretary Ed Morgan, KF6BNQ, Membership Marlene Odebralski, KK6CTX, Newsletter Editor Bob Trujillo, KG6NIB, Communications Director

> General Meeting April 14, 2016, 7:00 pm

Mike Intyre W6WAR gave a update on the Pacific Seafarers Net and what it is they do to help small and large vessels. A little background on Mike:

- Ham since 1994, ARRL member, Married to Gail KE6SYF,
- Now retired
- Hobbies:
  - Shooting:
  - Vertical rock climbing on 2 Continents, in 3 countries and 10 states. Mike has been to 21,000 feet without supplemental oxygen.
- MARS Region 9 Director for AZ, CA, HI, NV and most of the Pacific, MARS call AAA9RD.
   Operates Winlink RMS station AAR9ET Pactor 4. ALE (automatic link establishment)
   9ETAAR Region 9 West.
- Net Control Operator for Pacseanet on Tuesday 0300Z.

Thank you Mike for visiting us and enlightening the group on the operations of the Pacific Seafarers Net.



Donna KK6UDF introduces the guest speaker



Mike W6WAR explains the operations of the Pacific Seafarers Net



Please note: Information to be disseminated to all RCARA Club Members via email should be forwarded to Marlene KK6CTX at <a href="mailto:xmadamxx@aol.com">xmadamxx@aol.com</a> for distribution. Please make sure your information and any changes are updated by letting Membership Chairman Ed Morgan KF6BNQ know at edimorgan@aol.com or (951) 689-1917.

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#### News You Can Use

#### Open Invitation

The Moreno Valley Amateur Radio Association, extends an invitation to members of Riverside County Amateur Radio Association and all interested guests to attend the May 5 membership meeting.

Clint Bradford, K6LCS, will be presenting his "**How to Work the FM Amateur Satellites With Your HT**" session at the Moreno Valley Amateur Radio Association on Thursday, May 5, 2016 at 6:30 PM. ALL are welcome to attend.

Attendees will be shown everything needed to work the FM voice ham satellites - with a re-occurring theme of, "Most hams already have most of the necessary equipment ... " Attendees can download a four-page tutorial beforehand at:

http://www.work-sat.com ... and Clint welcomes pre-presentation questions. Call him at 909-999-SATS (909-999-7287), or send email to <a href="mailto:clint@c

May 5, 2016 - 6:30 PM
Lake Perris State Recreation Area
17801 Lake Perris Drive
Perris, CA 9257

Meeting Room at Parking Lot Number 9
Call-in frequency 146.500 simplex once you are in the park.
(Just tell the attendant at the gate you are going to the MVARA ham radio meeting - you won't need to pay admission at the gate.)



Photo of Clint Bradford, K6LCS, during a recent amateur satellite contact demonstration using an HT.

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## **Gear In The Park and Meet & Greet 0800-1300 - MAY 7, 2016**

The Riverside Emergency Communication Group and guests will conduct a Show and Tell with Meet and Greet potluck at Fairmount Park near 9205 Market Street in Riverside, CA between 0800-1300 on MAY 7, 2016.



Who: Riverside Emergency Communication Group and Guests

What: Emergency Preparedness Gear Show and Tell - Meet & Greet with potluck following Where: Fairmount Park, Riverside, CA - Approximately: 9205 Market Street, Riverside, CA

#### **Three Primary and Three Secondary Goals**

Primary 01: Conduct a Show & Tell of equipment; interactive static display and individual shares.

Primary 02: Conduct Meet & Greet.

Primary 03: Become familiar with the use of the Incident Action Plan (coordinators/volunteers).

Secondary 01: Review what is in our kits.

Secondary 02: Provide a safe and secure event where RECG and guests can safely Meet & Greet.

Secondary 03: Maintain good site security and prepare for Field Day Activities.

GIT-P = layout of emergency preparedness gear and discussion of how and why we chose the things we chose. Where it was bought, how much it cost, how it is used and why it is important to your kit bag. This is a hands on exercise with a meet and greet and potluck at the end of the exercise. Focus groups will include anyone who is CERT, RECG, RCARA, ARES, Jurupa Valley and similar. This will give many a chance to meet for the first time and for the groups to come together at one location with a common concern; preparedness.

Talk-in on the KB6OXZ repeater 445.060 negative off-set, tones of 162,2 in and out

More information or questions: Rick KK6CTT <a href="mailto:rngr86@juno.com">rngr86@juno.com</a>

"Those who prepare today will survive tomorrow"

## THE NEWLY REVISED RCARA BYLAWS AND CONSTITUTION AS APPROVED BY THE MEMBERS ON APRIL 14, 2016

#### **Riverside County Amateur Radio Association**

#### **Constitution**

#### **Preamble**

We, as Amateur Radio Operators and those of similar interest, do band ourselves together as a non-profit organization, incorporated under the laws of the State of California. This organization shall be known as the Riverside County Amateur Radio Association, Inc., (hereinafter referred to as the "Association"). The purpose of the Association, whose basic charter is inscribed herein, is to foster and promote interest in Amateur Radio, to provide a nucleus for emergency communications and other worthy amateur activities, to promote membership in the ARRL and to provide a social climate for promoting camaraderie and good will.

#### Article I - Membership

**Section 1:** All persons interested in Amateur Radio shall be eligible for membership. Membership shall be by application and election upon such terms as the Association by its By-Laws shall provide.

#### Article II - Elected Officers and the Board

- **Section 1:** The elected Officers of this Association shall be: President, Vice President, Secretary, Treasurer, Editor of the Monitor, Director of Communications and Director of Membership.
- **Section 2:** The elected Officers of the Association shall serve for a term of one year.
- Section 3: The Board of Officers (hereinafter called the Board) shall consist of the elected Officers of the Association, the immediate Past President of the Association, and the Trustee of the Association Amateur Radio Station license. The Board shall be responsible for the Association property Both the immediate past president and the Association license trustee, although considered as part of the Board, will service in an advisory capacity only, will not have board voting rights, and will not be included as part of the board quorum count.
- **Section 4:** Any vacancy occurring on the Board, between elections, shall be filled by an appointment made by the remaining members of the Board; said appointment being filled by a FULL MEMBER of the Association for the balance of the vacant term, and such appointment being made at the first Board meeting after the vacancy is announced.
- **Section 5:** Elected Officers can be removed by a majority vote of FULL MEMBERS present at a regular meeting provided there is a quorum.
- **Section 6**: The Board may appoint such officials or committees as it deems necessary. Appointed officials and committees shall be advisory to, but not voting members of, the Board.

#### Article III - Meetings

**Section 1:** The By-Laws shall provide for regular and special meetings At all meetings, a quorum shall be met when there are at least 25 percent of FULL CLUB MEMBERS present.

#### Article IV - Dues and Assessments

**Section 1:** The Association may levy upon the general membership such dues or assessments as deemed necessary for the business and operation of the Association within the objectives set forth in the Preamble. Non-payment of such dues or assessments will result in termination of membership in the Association.

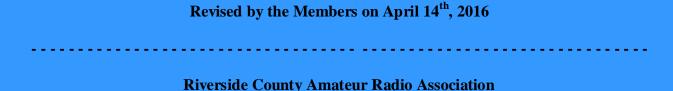
#### Article V - Parliamentary Procedure

**Section 1:** Robert's Rules of Order, latest edition, shall govern all proceedings of this Association except as otherwise stated herein.

#### Article VI – Amendments

**Section 1:** The Constitution and/or By-Laws must be amended by a majority vote of the FULL MEMBERS present at any regular meeting, provided a quorum exists. Proposals for amendments to the Constitution and/or By-Laws shall be submitted to the Board in writing. Notification to all of the membership by publication in the Association newsletter is required prior to voting on proposed amendments.

**Section 2:** The Board may call for a review of the Constitution and/or By-Laws at any time.



By-Laws

#### Article I – Membership

**Section 1:** There shall be three classes of membership in the Association as follows: FULL MEMBER: A FULL MEMBER shall be a holder of a valid amateur license and shall be entitled to all rights and privileges accorded to members of the Association, including:

- A. Vote on all questions brought before the members and in all elections held by the Association.
- B. Run for and hold office in the Association.
- C. Receive all Association publications.
- D. Have all pertinent access codes related to the Association Repeater and Website.

E. Any additional rights and privileges from time to time as may be deemed appropriate by the Board. FULL MEMBER VIA VE-TESTING: Non-members, who become Radio Amateurs as a result of passing their first VEC license examination at an RCARA-sponsored VE Testing Session, shall be granted FULL membership for the balance of the examination year without payment of any dues for that period. Such membership does not relieve any member from the obligation of assessments as outlined in Article IV of the Constitution titled Dues and Assessments of the Constitution.

ASSOCIATE MEMBER: An associate member is one who is interested in amateur radio but does not hold a valid amateur license. An associate member has all of the rights and privileges of a FULL MEMBER except voting and holding office.

**Section 2:** Persons desiring initial membership in the Association shall submit an application with full payment of dues specified herein. FULL MEMBER applicants must present a copy of their current FCC Amateur Radio License at the time of application.

#### Article II – Meetings

**Section 1**: Meetings of the Association shall be held once a month at a date and time determined by the Board and, if changed by the Board, concurred with by the membership at the next regular meeting of the Association. Special meetings may be called by the President or upon written request by any five FULL MEMBERS. Notice shall be provided to all members at least 72 hours prior to any such special meeting and shall contain the business to be transacted.

#### Article III - Nominations and Elections of Officers

- **Section 1:** Nominations shall be accepted from the floor at the September and October meetings as well as prior to the election process at the November meeting.
- Section 2: No person shall concurrently hold more than one office and/or appointed position.
- Section 3: All candidates for any elective office shall be at least 18 years of age and be FULL MEMBERS.
- **Section 4:** Installation of newly elected officers will take place at the December meeting.
- **Section 5**: Terms of office shall be concurrent with the Association's fiscal year of January 1<sup>st</sup> to December 31<sup>st</sup> of that same year.
- **Section 6**: Election shall be a simple majority of the FULL MEMBERS present at the November meeting. The ballot count shall become a matter of record and be made available to members upon request. If a candidate is running unopposed, a verbal declaration may be permitted at the direction of the presiding officer and with the acceptance of the membership.

#### Article IV - Duties of the Officers

**Section 1:** The President shall preside at all meetings of the Association, enforce due observance of the Constitution and By-Laws of the Association, sign all official documents and perform all customary duties pertaining to the Office of President.

**Section 2**: The Vice President shall assume all duties of the President in the absence of the latter and shall be responsible for drafting a one-year program calendar with input from the Board and arranging programs for regular meetings.

Section 3: The Secretary shall keep a permanent written record of the proceedings of all official meetings, have them published in the next Association newsletter, make them available to members on request, and read pertinent communications at each meeting. It shall be the duty of the Secretary to keep the Constitution, By-Laws and Articles of Incorporation along with the date of amendment and have these documents available at every regular, special and Board meeting of the Association. The Secretary shall cause all amendments to the Constitution and/or its By-Laws to be noted thereon and shall make available copies to members upon request. A copy of all correspondence made by other clubs members on behalf of the club shall be sent to the Secretary and kept for reference

**Section 4:** The Treasurer shall receive and receipt all monies paid to or by the Association. The Treasurer shall keep a current, accurate, and permanent account of all monies paid to or expended by the Association. The Treasurer shall pay all bills, with proper authorization of the Board of Directors. The Treasurer shall submit an itemized statement of disbursements and receipts at each Association meeting at the request of the presiding officer. A financial statement shall be prepared for the quarters ending December, March, June and September,

and made available upon request to FULL and Associate Members at the next meeting.

**Section 5:** The Editor of the Association newsletter shall see that it is published and distributed each month at least 10 days prior to the regular meeting. Paid Members with e-mail capability shall be notified of the newsletter being posted on the Association's Website.

**Section 6:** The Director of Membership shall keep a roll of members, screen and accept applications for membership, collect and receipt all dues payments, and turn over to the Treasurer dues and any special fees collected from members. The Director of Membership shall inform the Board of all new Members as they enroll, and provide a Membership Roster to all Members in the early part of each year

**Section 7:** The Director of Communications shall be primarily responsible for management of the operating activities of the Association such as Field Day, coordination with other emergency communication organizations and other Public Service communication events and exercises. He/she shall be responsible for making an accounting of the Association property in the months of January and December.

**Section 8:** Each Board member shall perform such other tasks as approved by the Board; however, the performance of such tasks shall be limited to the current Board's term of office unless reaffirmed by the following year's Board.

Section 9: Duties of appointed officials and their service period will be defined by the Board. Appointed officials shall consist of at least 1) a Trustee of the Association Amateur Radio License. 2) A Webmaster. 3) A Repeater Committee. Other appointments may include, but are not limited to such positions as: Quartermaster, Education Chair, Association Librarian, Association Photographer, Association Historian, Public Information Officer (PIO), Elmer Chair, Sunshine Chair, Control Operator Chair, Refreshment Chair, etc.

**Section 10:** All officers and officials of the Association, whether elected or appointed, shall upon leaving office transfer possession of all Association property, documents and files to their successor or person assigned by the Board. All inactive records shall be transferred to the Association Historian.

#### Article V - Duties of the Board

**Section 1:** The Board shall conduct the business of the Association in accordance with the laws of the State of California, the Articles of Incorporation, the Constitution and the By-Laws of the Association.

- **Section 2:** The Board may, at its discretion, bring any matter before the membership of the Association for consideration.
- **Section 3:** If any officer of the Association fails to appear at three consecutive Regular Meetings or three consecutive Board Meetings without good cause, the office may be declared vacant by the Board and such vacancy filled under the provisions of Article II, Section 3 of the Constitution.
- **Section 4:** Upon resignation or removal of any officer of the Association, the office shall be declared vacant and a special appointment shall be made the Board under the provisions of Article II, Section 3 of the Constitution.
- **Section 5:** There shall be a monthly meeting of the Board. Special meetings of the Board may be called by the President.
- **Section 6:** At any meeting of the Board, Four Board members shall constitute a quorum.
- **Section 7:** The Board shall be responsible for the use and maintenance of the Association's property.
- **Section 8:** The Trustee of the Association's Amateur Radio License shall ensure that the operation of the Association repeater, Field Day stations, emergency stations and any transmitter operated under the Association call sign is in accordance with FCC rules and regulations.

#### Article VI – Financial

#### **Section 1:**

The fiscal year of the Association shall begin on January 1<sup>st</sup> of each year and end on December 31<sup>st</sup> of the same year.

#### **Section 2:**

- A. Dues shall be due in January of each fiscal year and shall be determined by a majority vote of the membership as advised by the board during the preceding years October monthly meeting.
- B. Any person whose dues become two (2) months in arrears will be terminated as a member of the Association; however, any renewal within the year shall be at full annual dues.
- C. New members will be assessed in accordance with the following schedule:

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January 1 – June 30th . . . . . . . Full current yearly dues amount July 1 - December 31 . . . . . . . . . 50% of current yearly dues amount
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- **Section 3:** Any special assessment shall require the approval of two-thirds majority of the members present at a regular meeting. Advance notice of the intent to levy such assessments shall be published in the Association newsletter.
- **Section 4:** To defray expenses, a door donation may be requested.
- **Section 5:** Prior approval by the Board shall be required for all expenditures from the Treasury. The Treasurer, President, Vice President and Secretary will be authorized to sign checks. Expenditures for any club function (e.g. Field Day, the annual Christmas Party, the annual club picnic, repeater maintenance or improvement, etc.) which exceed \$100.00 per event must be approved, in advance, by majority vote of the membership in a regular meeting.

Section 6: The financial records for the Association shall be audited by an Audit Committee annually, and at any other time the Board deems necessary. The report of the Audit Committee shall be published in the Association newsletter.

**Section 7:** All monies of the Association are to be kept in a local bank or credit union in Riverside.

#### Article VII - Publications

- **Section 1:** The official publication of the Association shall be a newsletter, named The Monitor, and which shall be published and distributed at least 10-days prior to the regular monthly meeting.
- **Section 2:** The purpose of the Association newsletter shall be to notify members of meetings, to provide notice of elections, By-Law amendments, etc., to provide notice of upcoming programs and to provide timely news concerning amateur radio and the activities of the Association and its members.
- **Section 3:** Advertising will be accepted for publication in the Association newsletter. Publication of any advertisement will be at the discretion of the Editor. Fees for advertising will be established by the Editor with the approval of the Board.

#### Article VIII – Repeater

**Section 1:** Any proposal(s) for change to the operating procedures of the Association repeater, the repeater configuration, or the control of the club repeater must be proposed and presented at a regular meeting of the Board. The proposal(s) shall also be in the Association newsletter prior to a Board vote. A simple majority shall be required for passage of such proposal(s).

#### Article IX - Disposition of Association Property

**Section 1:** The disposal of Association property shall be made by the Board with the approval of the membership.

**Section 2:** In the event this Association is dissolved, any residue of property then remaining after payment of all debts, including all funds held in the name of the Association, shall be contributed to the ARRL, except that equipment (e.g. radios, repeaters, antennas, hardware, software, etc.) may be donated to a group or organization selected by the Board, where such equipment may be put to continued use. In the event the Board fails to agree on recipient(s) of any equipment within 30 days, it shall be sold with the resulting funds also being contributed to the ARRL.

#### Article X - Use of the Association Call Sign - W6TJ

**Section 1:** A member has automatic permission to operate for public service or emergency activities, using the call sign W6TJ, for a period of less than 72 hours without formal permission. All such individual operation shall be within the member's license privileges.

**Section 2:** The temporary (72 hours to 30 days) use of the Association call sign (W6TJ) may be authorized by the Board.

**Section 3:** The long-term use of the Association call sign (W6TJ) shall be allowed only when it is approved by a simple majority of the membership at a regular meeting.

#### Revised by the Members on April 14<sup>th</sup>, 2016

## Silent Key



## THOMAS MAHAN AC6XJ FEBRUARY 14, 2016

Tom was not active in the club for about 2 years because of illness, but he was a long time RCARA member.

He had retired from Lockheed.

Family services were private.

Tom had been active on the ten meter net in past years. He had provided a 75 meter dipole which was used at several Field Days.

He had a keen interest in experimental HF and VHF antennas. One unique 2M antenna he designed was the subject of an article for CQ magazine. Those of us who visited his La Sierra station were impressed by his well-equipped, home built outbuilding shack, and his homebrew 30' wooden tower, which resembled a forest service fire watch tower. He was able to make adjustments to his quads and other antennas by standing next to them at the top of the tower. He had great success in working HF DX.

RCARA members send their condolences to his wife Margaret and to the family and friends.

Tom will be missed both on the air and off.

#### FYI

#### April 9, 2016, 12:00 noon

The Simplex Net Test exercise from Mt. Rubidoux was successfully executed by RCARA member Jeff KW6MOT with the capable assistance of Rick KK6CTT. Fifteen contacts were made reaching as far as Norco. Thanks Jeff and Rick for your dedication and efforts.





#### April 23, 2016, 12:00 noon

As expected, the Simplex Net Test exercise went well. Jeff KW6MOT rode his Bicycle Mobile to the California Citrus State Historical Park, the future site for our Field Days and conducted the net exercise.

He reached out to ham operators throughout the Riverside area to test the range of contacts. Thanks Jeff and to all who participated by checking in via Simplex.

It turned out that several RCARA club members stopped by show support and to help. It was a good chance to scope out the park and plan for Field Days. Ideas were shared and much positive input was exchanged.

Rick KK6CTT set up his antennas, solar panel and "radio box" ... a treat for all to observe.

Ryan KK6WCX tested his home brew vertical antenna and was happy to report that it worked just fine. We were all in awe to learn that connector parts were created by Ryan with his 3D laser printer.

We're looking forward to the next exercise from our new Field Day site in the near future to test the possibility of a weather balloon, HF and whatever else these creative hams can come up with ... stay tuned for the pending date and information.







## RCARA Member Travels to Lewisburg, WV for Unique Opportunity to Visit Green Bank Telescope

Our club Vice President will attend this year's Airstream International Rally at Lewisburg, West Virginia; the rally's location offers a local venue that incorporates the very technology we embrace in our amateur radio hobby, the National Radio Astronomical Observatory (NRAO) Green Bank Telescope. The Green Bank Telescope or GBT is located just 70 miles northeast of Lewisburg. GBT's location in Deer Valley and the Appalachian Mountains provides natural shielding from radio signals that might interfere with its sensitive instruments. Its natural protection is enhanced by the National Radio Quiet Zone which bans certain types of LF, HF, VHF UHV and microwave radio signals within a 13,000 square mile area somewhat centered on the GBT and the Naval Information Operations Command Sugar Grove Station site that intercepts <u>all</u> international communications entering the Eastern United States (for security reasons, no public tour at Sugar Grove Station). The ban on radio signals applies to most AM and FM radio stations, TV stations, cell phones, Wi-Fi, garage door openers, etc.; exceptions to this ban are public safety for fire and police, citizen band radio and some ham radio although amateur radio operators have to submit a plan of their operation.

NRAO describes the facility as a complementary, state-of-the-art suite of four radio telescope facilities throughout the world for use by the scientific community, regardless of institutional or national affiliation; the international Atacama Large Millimeter/sub-millimeter Array in Chile (ALM), the Green Bank Telescope (GBT), the Very Large Array (VLA) in New Mexico and the Very Long Baseline Array in the Virgin Islands.

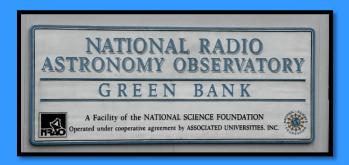
The GBT's "enormous 100-meter diameter collecting area, its unblocked aperture, and its excellent surface accuracy provide unprecedented sensitivity across the telescope's full 0.1 - 116 GHz (3.0m - 2.6mm) operating range. The Observatory also includes 43 and 20-meter telescopes and 45 and 40 feet telescopes located on the site for research and education. The Observatory includes active engineering research and development programs ranging in areas from digital, mechanical, structural, computational, and software engineering. The laboratories, utilities and support facilities make it an attractive location for a variety of research experiments, and it serves as the field station for several university-based research teams. The Observatory is also a major resource for STEM (Science, Technical, Engineering & Mathematics) education and public outreach and is used for an extensive array of programs in education and public outreach, and for the training of science and engineering students and teachers. These activities center on the Green Bank Science Center for visitors, with its auditorium, classrooms, research facilities and large exhibit hall and guided tours of the site and its many telescopes.

Amateur's don't have to travel back to West Virginia to visit an NRAO telescope; as noted above the Very Large Array (VLA) is located in New Mexico just west of Socorro. The VLA incorporates twenty-seven 25-meter radio telescopes mounted on dedicated rail cars and railroad tracks. The VLA dishes may be arranged in four configurations: A - with a maximum antenna separation between individual dishes of 36 km; B - 10 km; C - 3.6 km; and a D array - 1 km. The highest resolution from these is that of an antenna 36km (22 miles) across with the sensitivity of a dish 130 meters (422 feet) in diameter. The VLA computers analyze the data collected by the dishes as an *interferometer*; they multiplying the data from each pair of telescopes together to form interference patterns. The structure of those interference patterns, and how they change with time as the earth rotates, reflect the structure of radio sources on the sky. Scientists take these patterns and use a mathematical technique called the Fourier transform to make maps. The VLA facility includes a visitor center with both self-guided and guided tours.

#### For more info follow up with these Internet links:

- National Radio Astronomy Observatory: https://science.nrao.edu/facilities
- Green Bank Telescope: <a href="https://science.nrao.edu/facilities/gbt">https://science.nrao.edu/facilities/gbt</a> (Scroll down in the "Visit the Green Bank Telescope" window for visitor information)
- History of Green Bank Telescope: https://science.nrao.edu/facilities/gbt/facilities/gbt/green-bank-local-area-information/history-of-green-bank-and-the-nrao
- Very Large Array: http://www.vla.nrao.edu

Don Williams KD6UVT RCARA Vice President & W6TJ Trustee















### HAM GLAM

The "Official Field Day" attire will be black polo shirts embroidered with your name and call sign on the right and the RCARA antenna logo on the left. You can purchase your own polo shirt and we will do the embroidery for \$10. Yellow polo shirts will also be acceptable if you prefer. This is only a suggestion and your personal inclination.

JC Penney's and Kohl's department stores frequently have good quality shirts on sale for approximately \$10 - \$15.

Black ball caps are also available and can be embroidered with your name and call sign. Caps are \$15 which includes the hat and embroidery of the RCARA antenna logo and your name and call sign.

The official circle club logo with your name and call on metal magnetic name badges can be purchased for \$8.00.





Please contact Marlene KK6CTX to place your order or for more information: <u>xmadamxx@aol.com</u>

We can also do the official white polo shirts and hats embroidered with the RACES logo and your name and call.

The Hungry Hams Lunch Bunch will meet on Tuesday, May 17 at the Back Street Café, 3735 Nelson Street at Brockton in Riverside ... 11:00 a.m.

Please join us for some socializing and ham camaraderie. Let me know if you will be attending so I can make adequate Reservations: xmadamxx@aol.com

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#### Links to help "technify" your ham experience

http://www.arrl.org/

http://www.qrz.com

www.hamradio.com/

http://www.eham.net

http://www.arrl.org/qst

http://www.manualman.com

http://73s.com/

REPEATER LIST

http://rptrlist.w6jpl.ampr.org/

**ALL ABOUT BATTERIES** 

http://www.batteriesamerica.com/

http://nicdlady.com/

ECHO LINK INFO

http://www.echolink.org/

IRLP LINK INFO

http://www.irlp.net/

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If your phone number, address or email has changed, contact Membership Chair Ed Morgan to update your information: edjmorg@aol.com (951) 689-1917







## HAPPY BIRTHDAY



## MAY BIRTHDAYS

## Larry Junker WASPMY - May 6

Teel Stough KMEACY - Mety 8

Bonita Welch KDSUVP - May 9 Gervese Heimmond KISTFL - Mey 28

May beauty and happiness surround you, not only on your special day, but always.



## CALENDAR OF EVENTS



DAY/TIME	WEEKLY NETS	INFORMATION
EVERY SUNDAY 8:30 AM	RIVERSIDE COUNTY RACES/ARES HF NET 3945 kHz, LSB	DON WILLIAMS KD6UVT kd6uvt@arrl.net
EVERY MONDAY 7:00 PM	RIVERSIDE COUNTY AMATEUR RADIO ASSOCIATION RACES/ARES PUBLIC SERVICE NET 146.880 MHz MINUS 146.2 PL	RON BRALEY 951-369-5149  MARLENE  xmadamxx@aol.com  BOB COMMUNICATIONS DIR.  kg6nib@yahoo.com
LAST MONDAY OF THE MONTH 7:00 PM	RIVERSIDE COUNTY AMATEUR RADIO ASSOCIATION RACES/ARES PUBLIC SERVICE NET 148.880 MHz NO PL SIMPLEX	RON BRALEY 951-369- 5149 MARLENE xmadamxx@aol.com BOB - COMMUNICATIONS DIR. kg6nib@yahoo.com
EVERY TUESDAY 7:00 PM	Emergency Communications Group (ECG) WEEKLY NET KBOZX repeater 445.060 – TONES 162.2	group@cert-emcomm.net
EVERY TUESDAY 7:30 PM	QCWA NET 145.580 SIMPLEX	Tom Loughney, AJ4XM 352-425-1097
WHEN	MONTHLY EVENTS	CONTACT
3 <sup>rd</sup> SATURDAY OF THE MONTH 6:00 – 11:00 AM	CLAREMONT SWAP MEET 1580 CLAREMONT BLVD. CLAREMONT, CA FREE ADMISSION FOR VISITORS	Event Coordinator KG6AB@YAHOO.COM
UPCOMING EVENTS	DATE	INFORMATION
RIVERSIDE DISTRICT RACES MEETING 6:00 PM	MONDAY, MAY 2, 2016 4080 LEMON ST. RIVERSIDE, CA	Ron Braley, EC (951) 369-5149
RCARA <b>BOARD</b> MEETING 6:00 PM RCARA <b>REGULAR</b> MEETING 7:00 PM	THURSDAY, MAY 12, 2016 LA SIERRA UNIVERSITY CHURCH 4937 SIERRA VISTA AVE. RIVERSIDE, CA 92504	Ron Braley, President (951) 369-5149 www.w6tj.org
SATURDAY MAY 7 EMCOMM GIT-P GEAR/PREP/POT LUCK	FAIRMOUNT PARK, RIVERSIDE, CA (see above flyer for details)	Rick KK6CTT rngr86@juno.com
FIELD DAYS: DETAILS WILL BE FORTHCOMING AS AVAILABLE	4 <sup>TH</sup> FULL WEEKEND IN JUNE JUNE 24-26, 2016 California Citrus State Historical Park 9400 Dufferin Ave. off Van Buren Riverside, CA 92504	Larry Junker WA6PMY FIELD DAY CHAIR larryandmelba@junker- family.com
annual Christmas Party	6:00 PM - FRIDAY, DECEMBER 9, 2016 KOUNTRY FOLKS RESTAURANT	RSVP: Ron Braley (951) 369-5149 Marlene: xmadamxx@aol.com