

**The History Of  
The Milwaukee Radio  
Amateurs' Club Inc.  
“MRAC”**

**Version 2019  
1917-2019 – 102 YEARS!**



**100 Years of ARRL Affiliation!**

# **The History of the Milwaukee Radio Amateurs' Club Inc. 2019 Edition**

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# Introduction

(2019)

Just to get things started, I wish to offer a quote which while not directly related to amateur radio, helps to really define the term “amateur” as it may apply to us “hams”. This is a quote from Paul W. Klipsch, founder of Klipsch and Associates (now known as the Klipsch Group part of the Audiovox Corporation), one of the first, and still an important, high end audio equipment manufacturer. Among his many awards, Klipsch is the holder of 23 patents, is a member of the Engineering and Science Hall of Fame, the Audio Hall of Fame, and the Consumer Electronics Hall of Fame. He once said of himself,

***"Audio was a hobby and then a profession, but I still consider myself an amateur in that an amateur is one who practices his art for love."***

This book is a brief (now in excess of 240 pages) compilation of the history of the Milwaukee Radio Amateurs' Club with a bit of local and international history thrown in just to tie things all together. In this spot there used to be an introduction which started small but continued to grow until it became rather long all by itself, so we decided to make it a chapter and call it the History of the History. That sounded good as a way to explain how all the chapters came into being.

The total history of the club cannot be told without bringing in the few thousand pages of documents that we have covering the business of the club from the beginning. Of course asking anyone to actually read all of that is a bit much, but to really dig into things feel free to have a look, the real story is in there (and we are still trying to digitize all of it).

Hopefully we can keep this a living document so future amateur radio operators can fully appreciate the long and illustrious (and sometimes not so stellar) story of the Milwaukee Radio Amateurs' Club. The plan is to still try update this document every year with at least the important events of the past year (both for MRAC and the world). With each passing year more club information is uncovered and additional articles will be added as discovered. If anyone has any information (or comments) on important topics as well as any information for the officer list, member list, or any other topic from our past (including the desire to write a chapter yourself) please contact us. More general electronics, radio, and technology news and history will be added to the timeline. This is so more people can be informed of the history and significance of technology and amateur radio's place in that history. Also many new hams may find this document as one of their first exposures to this information. Over the years a lot of new hams get into the hobby to just talk. While there is nothing wrong with that, there is much more to the hobby. From the beginning, MRAC has always been interested in the education of its members and all hams in general. Maybe this book can help with that too.

Something which may be noticed while reading the book. MRAC is not afraid to air its occasional dirty laundry. The club is not about to hide or distort the truth just to make itself look good. Only a proud, vibrant, and professional organization can operate with full and honest disclosure.

This book of club history is really not the whole story. It is just an overview of what the club has done. There is also a photo album/scrapbook which overflowed 2 - 3 ring binders on paper so became a large slide show video presentation exclusively in 2015. At this time the videos are 95% silent, but a soundtrack of music and narration and more is high on the

list for future enhancements. There is also a full production (narration and background music) of an informational video for the club's 100<sup>th</sup> anniversary. Be sure to check that out for a quick (15 minute) taste of our history. Finally, there is a never ending project of scanning all the collected club documents (or collecting electronic versions from recent computer generated documents) from the beginning of the club to current. Currently there is over 1GB of Adobe Acrobat files in the electronic archives (over 2200 files). All of this information is available to any club member or anyone interested in the club. We are investigating trying to get much of that information available on-line for all to access at any time (and then we won't have to burn discs).



*Figure 1 - Some club archives (just paper, no photos) yet to be scanned.*

For a number of years the club touted itself as the oldest continuously active amateur radio club in the world. In the late 1990's we discovered information that contradicts that (the information age and all made it easier to find the information). However, while a number of clubs actually started before MRAC. Only a handful of those remain and few have remained continuously active. MRAC has also been an affiliated club of the ARRL for 100 years. It is possible that no other club can equal that (check out the chapter on that very item). Even more interesting, MRAC has one of the largest collections of organization archives. Many clubs, even those who started much later than MRAC have little to no historical archives. Why members over the years decided to keep their information we do not know. We do know it helps make MRAC unique as well as provides historical information to the new member / ham.

So MRAC is one of a very few of the world's oldest continuously active amateur radio clubs. Also, MRAC was not the first club formed in the Milwaukee area. The Milwaukee Radio Association is one of a number of clubs that were formed prior to MRAC. That club died out during World War I and its membership was absorbed into MRAC. (Maybe we should change our start date?). The Milwaukee School of Engineering radio club actually started in 1914, the same year of the ARRL. The problem with school clubs is their operations ebb and flow based on students attending at the time. According to a letter from ARRL in 1969, MRAC at that time (50 years of affiliation) appeared to be the oldest continuously active radio club affiliated with ARRL. But why not read the story for yourself.

Why should you care about the history of a lowly radio club? If you are an officer of

the club it is good to know what has been done before or maybe not done before. What worked and what did not. If you are a member of one of the many other local radio clubs, discover that just about everything any other local club does or has done was done first by MRAC. If you are a member of MRAC or just a visitor to the history, why not read about some of the lives of the people who were involved with amateur radio and MRAC over the last 100+ years. Recently, a newer club member and recent board member told me that every board member should be required to read the history to understand the heritage of the club. While that makes me feel good, I won't go that far (sometimes board members do not even know what's in the by-laws, sorry, editorial)

Amateur radio is a very unique hobby. Why not learn everything you can about this strange and fascinating pursuit. After all, like it or not, you are carrying on the tradition started by the people listed in this document. Even though many are gone now, make them proud of what has come of their work and passion and don't let them down!

So let's travel through the years and see the highlights of MRAC, amateur radio and the world around us.

Dave DeFebo, WB9BWP, President 1982-1984, 1998-2002, 2010-2012, other past offices, Janitor, current history guy (2003-), part of repeater technical committee and license trustee and (usually) proud club member since September 1968 (finally made it to life member in 2015 – now I'm an old guy).

# Credits/Revision History

(2019)

**2000** – Initial creation including timeline and Past Presidents. Created an 8-1/2 x 5-1/2 printed booklet with photo montage on back cover and distributed to all club members.

**Jim Tromblay WB9LNU** – initial and continuing research and text

**Dave DeFebo WB9BWP** – document formatting, master printing, photo montage for printed book, back cover

**John Merkl WB9PSE** – hard copy printing and member distribution

**2003** – Continuing timeline enhancements and general corrections. Reformatted for 8-1/2 x 11 page and published only electronically in PDF form.

**Dave DeFebo WB9BWP** – “*Introduction*”, and lots of other stuff

**Hans Schroeder AE9G** – proofreading and corrections

**2005** – Continuing timeline additions and enhancements. Expanded the Introduction. Added articles on the early years of the club, the communications van, MacArthur Parade, and the W9RH Repeater.

**Loy Schell Hillegas-Baird 9HO** – “*The Milwaukee Radio Amateurs’ Club*” – the beginning

**Dave DeFebo WB9BWP** - “*The W9RH Repeater*”, and lots of other stuff

**Dave Karr KA9FUR** – Proofreading and approval of the article “*The W9RH Repeater*”

**Mark Tellier AB9CD** – Proofreading and master copy printing

**2006** – Continuing timeline additions and enhancements - **Dave DeFebo WB9BWP**

**Jim Tromblay WB9LNU** - “*A Brief History of MRAC By-Laws*”

**Yvonne Robel** (daughter of Clarence Crapo W9VD) – letter to MRAC

**2007** – Continuing timeline additions and enhancements – **Dave DeFebo WB9BWP**

**2008** – Continuing timeline additions and enhancements, Beginning of All Members List.

**Jim Tromblay WB9LNU** – “*The All Members List*” initial data collection.

**Mark Tellier AB9CD** – proofreading

**2009** – Continuing timeline, member list, officer list additions and enhancements. Added the beginnings of articles on the VEC, Field Day, FM Simplex Contest and lists of officers of national organizations and Silent Keys.

**Ray Adams W4CPA** – VEC history portion of VEC Story

**Tom Fuszard KF9PU** – Various parts of the VEC Story and proofreading of whole chapter.

**2010-2011** – Continuing timeline, member list and Silent Key additions, officer list additions and miscellaneous enhancements – **Dave DeFebo WB9BWP**.

**2012** – Continuing timeline, member list and Silent Key additions, officer list additions and miscellaneous enhancements (enough so you have to read through everything). The introduction of the article on the MRAC / MAARS Interclub hamfest – **Dave DeFebo WB9BWP**.

Starting for this year, any chapter/section of this book will contain the year of the latest revision to that chapter/section beneath its title.

**2013** – Continuing timeline, member list and Silent Key additions, officer list additions and miscellaneous enhancements – **Dave DeFebo WB9BWP**.

A reprint of a newsletter story on Emil Felber W9RH.

**L. S. Hillegas-Baird x9HO** - letter from the club founder to a later club President.

**Dan Workenaour N9ASA** – Master copy printing.

**2014** - Continuing timeline, member list and Silent Key additions, officer list additions and miscellaneous enhancements. The addition of a chapter (just the beginning) on the history of club meeting programs. The timeline is greatly enhanced with information on various electronic and other technology items as well as more general ham radio history – **Dave DeFebo WB9BWP**.

**Dan Workenaour N9ASA** – Master copy printing.

**2015** - Continuing timeline, member list and Silent Key additions, officer list additions and miscellaneous enhancements. The timeline is greatly enhanced with information on various electronic and other technology items as well as more general ham radio history. Added the Amateur's Code and the beginning of meeting program history – **Dave DeFebo WB9BWP**.  
**Dan Workenaour N9ASA** – Master copy printing.

**2016** - Continuing timeline, member list and Silent Key additions, officer list additions meeting history additions and miscellaneous enhancements. The timeline is again greatly enhanced with information on various electronic and other technology items as well as more general ham radio history as well as some local history. New introduction and made old introduction The History of the History chapter – **Dave DeFebo WB9BWP**.  
Added "*Set Another Place for Sister Margaret*" chapter.  
**Theodore J. Cohen N4XX** – "*Set Another Place For Sister Margaret*"  
**Duane Meyer KX9N** – Some early name / callsign research  
**Bob Roske N0UF** – Missing name / callsign info for member list  
**Dan Workenaour N9ASA** – Master copy printing.

**2017** - Continuing timeline, member list and Silent Key additions, officer list additions meeting history additions and miscellaneous enhancements.  
Field Day 1961 report (from July 1961 Chatter) by **Art Vahovius W9VSO**  
MRAC and License Classes and Training (from Sept 1993 Chatter) – **Dave DeFebo WB9BWP**.  
**Dan Workenaour N9ASA** – Master copy printing.

**2018** - Continuing timeline, member list and Silent Key additions, officer list additions, meeting history additions and miscellaneous enhancements. The addition of a chapter on the digital archives.

**2019** - Continuing timeline, member list and Silent Key additions, officer list additions, meeting history additions, some repeater updates with new information and miscellaneous enhancements. The addition of the chapters ARRL Club Affiliation and ARES and MRAC. Major revision to the page on members holding offices with ARRL, NCVEC, etc.  
**Jim Cronin K9UGD** – Some early name / callsign research

Past Officer Listings started by - **Emil Felber W9RH, Jim Tromblay WB9LNU**

Member list started by - **Jim Tromblay WB9LNU**

And also thanks to the members of the Milwaukee Radio Amateurs' Club Inc. since 1917 who helped create all this history...

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# The History of the History

Dave DeFebo WB9BWP  
(2019)

For a group in existence as long as the Milwaukee Radio Amateurs' Club, no effort was made to compile an official history of the group until 2000. I mentioned at a board meeting that we should undertake a project to create a written club history. I was hoping to form a committee of 2 or 3 people but Jim Tromblay, WB9LNU, the club Secretary, Custodian, Historian, Trustee, etc offered to give it a shot himself. As Custodian and Historian, he had most of the club historical records in his possession. A couple of months later Jim handed me his take on the club history written in an outline/timeline form, year-by-year. As is the case when sifting through 80+ years of documents, there were some gaps in the time-line. Some of those gaps were filled with general world news headlines (taken from newspaper clippings found in the club archives by Jim). Those headlines serve to add to the ambiance of the MRAC story.

I dug through some pictures (while working on the club photo album/scrapbook), and added them to Jim's text to create a 5-1/2 x 8-1/2 booklet which we had printed and handed out to all members. I then created a "normal" size 8-1/2 x 11 document with some color added (because we can) that was published on the club Internet site for download.

Shortly after publication, Hans Schroeder, AE9G, asked if I would mind a critique of the document (after all, Hans was a recently retired college professor). I said sure, go ahead, and at the next club meeting Hans handed me a marked up document with corrections in punctuation, grammar, and some other comments. I put this in the pile for future work and in 2003, incorporated Hans' comments, added info for the years 2000-2003, filled in a few other bits and pieces and published the 2003 version of the history on the club Web site (we did not offer a printed version due to costs). I was then Historian as Jim Tromblay had retired and moved out of town.

In 2005 the history was updated to pick up information of the years 2003 on, and even add some additional history information. In 2003 Ed Seruga KE9JJ produced a box of photos and papers he had. In 2005 the club received from Robert Felber, the son of Emil Felber W9RH SK, 2 boxes of club papers, a scrapbook of newspaper clippings about the club and still more photos. The recent finds produced a number of documents that were written by club members over the years that covered some of the milestones of the club. Those documents have been included in versions of the MRAC History since 2005 in their entirety. I also added a written history of the club repeater before those details are lost and forgotten. All those articles appear following the history timeline as originally developed by Jim. Some of the articles have appeared in past club newsletters. Also the beginnings of a complete list of club officers was added (from a list compiled by Emil Felber).

The 2006 edition marked the first in annual updates. Of course those updates include recent news items about amateur radio and the club and the world around us as listed in the timeline. Also included in 2006 is a letter from Yvonne Robel, the daughter of Clarence Crapo W9VD SK (the second President of the club), which accompanied a collection of 75 glass mount slides of club activities from almost the beginning through the 50's. Jim Tromblay, WB9LNU while cleaning up his stuff from moving to northern Wisconsin, presented me with a continuing list of club officers (picking up from where the Emil Felber list left off through 1997) as well as a brief write up of by-laws history he prepared for a by-laws change

in the mid nineties. I have added to the officer list and the by-laws history to sort of bring them up to current time. I say sort of as the officer list is a big project and is not yet 100% complete. The repeater story was also approved by one of the principles in the project, Dave Karr, KA9FUR, and I added some additional new information.

For 2007, the officer list was added to greatly. It is still not 100% but much closer. Besides additions to the timeline for 2006 and 2007, there were additions and corrections to entries from earlier years. 2007 marked the 90<sup>th</sup> birthday of the club.

For 2008, new items include the beginning of a complete member list. It is only a beginning (started with around 800 names, currently over 1400) as with almost 100 years of members it will take some time to get everyone in the list. Once again, some work by Jim Tromblay was the genesis of this project as Jim gave me a list he started compiling while he still had the club archives (an entire note pad filled with handwritten calls, names and dates). In the very early years, full names were not used in lieu of first and middle initials and last name. Also call signs were also not always listed with a person's name, so very early data compilation requires a lot of work. In recent years the constantly changing call signs make things difficult. Of course, the timeline picks up recent information as well as more information added to past years, including more on the beginning years of radio and radio clubs. Some data has been expanded where more detail is found.

2009 brings a couple of new articles, including the FM Simplex Contest, the club's involvement with Field Day, and the club's involvement with the VEC testing program. The whole VE / VEC thing is not without some drama. Some of those involved did not want all the dirt published just yet. Maybe someday all that information will be compiled. As usual the timeline has additions and enhancements and more info is added to the officer and member lists.

Currently the Field Day story is just a small beginning, dealing with recent operations and little bits of info from previous years. The FM Simplex Contest story will of course have additions each year as the contest continues. Also new is the beginnings of a listing of club members who have held elected or appointed positions with national organizations (ARRL, NCVEV, etc). We are also adding a list of Silent Keys. At some point everyone who is a member would appear in this list. I started the list as for a few years in the 2000s the club kind of neglected to mention / honor members who recently passed. For a time this was the only mention of them. It is being included not just to take up space, but to act as a final tribute to a club member and is listed by the year a member passes (even if they are not a member at that time).

For 2010 thru 2012 there are no new major articles/stories, but there are updates and additions to the timeline, the officer list, the total member list and the silent key list along with additions to some of the existing stories. Officer duties have kept revisions low. Nonetheless, the book has grown to 113 pages.

2013 brings the usual additions and updates to the timeline and other date sensitive sections (Field Day, FM Contest, etc.). Of course there are more additions to the all member lists and unfortunately the Silent Keys list. In recent years the timeline has seen additions relating to some of the pioneers of the amateur radio equipment field as well as general electronics and audio electronics. After all, amateur radio is a technical hobby and over the years many hams have been involved in and certainly been a consumer of audio equipment and other types of electronic equipment. Also, any reprints of existing documents are printed exactly as found. There may be misspelling, wrong grammar, slang from a particular era. Things are left as they were originally written (don't blame the messenger...).

For 2014, there are significant additions to the timeline covering more general amateur radio history along with more general technical, electronics science and consumer electronics history (remember, Amateur Radio IS a technical pursuit). More members are added to the all-time members list. There is also the beginning of a chapter listing meeting programs through the years. Believe it or not, that list can help come up with current programs. With the number of new hams entering the hobby, we would like to present as much history relating to the hobby as possible. Yes much of the information can be found elsewhere (information is culled from numerous sources), but often only in bits and pieces.

The 2015 edition as usual adds items to the timeline both new and past news. The usual chapters have additions like Field Day, FM Simplex Contest, Hamfest, Officers, Members, etc. "*The Amateur's Code*" has been included as that was published a number of times over the years in various club publications.

The date of last revision of a chapter is also now added below chapter titles. Doing so makes it easy to find a chapter which may have had some changes since the last book publication.

During 2015 Duane, KX9N sent me a series of emails discussing some of the missing calls for the names of very early members. He came up with some first names (where we just had initials) and possible call signs and you will see them in the member lists starting with the 2016 edition. That's what this book is all about, getting club members involved (of course we get more correspondence from non-members than members)!

The biggest addition for 2016 came in the form of a reprint of a CQ Magazine article entitled "*Set Another Place for Sister Margaret*". The story of the article is told at the beginning of the chapter and won't be repeated here except to say it is written by a very prominent former club member (former because he is no longer in the area, but was made a Life member in 2017!).

For 2017 a written report on the 1961 Field Day, which was pulled from the July 1961 Chatter, is included. Also lifted from a past Chatter (September 1993), comes an article on the license classes which MRAC ran between 1976 and 1996.

2018 saw the usual additions and tweaks to the various lists – members, meetings, Field Day, etc. A chapter was added discussing the digital archives which are currently available on a data DVD. Also in case no one has yet noticed, many of the "lists" have had their text font shrunk. Without that, this book could be 300 pages by now.

2019 added 2 new chapters, one on ARES and MRAC and besides being a narrative by the author includes some Hamateur Chatter articles and pictures. Few people still around know about the WISN transmitter donation which started AREC Inc (with all MRAC members). The other new chapter concerns the affiliation of MRAC with ARRL. 2019 marks 100 years of this pairing and since MRAC was in the first group affiliated, no club has been affiliated longer and this old (maybe not stated correctly). Both of those chapters will have more info added in future editions of this history. Of course there were the usual additions to the member and silent key and officer and meeting lists. The list of members holding national offices was redone with new information and an additional list in Office Title/chronological order to go with the list of individual names (in other words making the list easier to read). Plus there were some tweaks to other chapters, so be sure to check the dates under each chapter's title.

Also note, that all photos and images appearing in this book are contained in the slide show videos as discussed in the following chapter on the club archives.

# The MRAC Archives

(2019)

For whatever reason, MRAC officers and members decided to keep almost all paperwork concerning the club from just about the beginning. Between January 1917 and around 2000 that amounted to a lot of stuff. In the early 2000's we started scanning documents and paperwork and photos. So far there are over 2400 PDF files of archive documents and over 1400 images (photos, graphics, etc). As yet (2019) the job is not over (maybe a bit more than half done). What we have accomplished so far is the multiple file cabinets and boxes of archives is down to a couple of boxes and a milk crate full of photos and other small paper items.

The last chapter discussing the history book covered how we started this whole project with a written history of the club (this book).

So where are all the digital archives? Right now the masters exist on the computer of WB9BWP (and multiple backups) as well as a couple of Blu-Ray data disks distributed to select people, so the master data exists at multiple sites. A data DVD is also produced containing the PDF files, some compressed audio files, and about 4.5 hours of videos consisting of photo and graphic slide shows (all the slides, photos, other graphics) and some original shot video of club activities. The actual pictures (images) as well as uncompressed audio files are not currently distributed. The DVDs are freely distributed (donations to the club are graciously accepted). Special DVDs containing any original files (documents, handouts, forms, etc) as well as bitmap and compressed images and wave and compressed audio files as well as the "normal" distributed archives are produced yearly and given to club board members at the time.

On the DVDs are the document PDF files arranged in chronological order. We kicked around just how to "file" all the PDFs and by year seemed to be the easiest to find some information. If for instance all the newsletters were in a separate folder and then further grouped by date, you would have to work down through multiple levels to try to find what you wanted. Just going by year results in much less moving around levels of folders. One type of document that is grouped all by itself are all copies of the club By-Laws.

For the slide show videos, starting in late 2018 there are now 14 videos of images with Field Day being split into 4 separate videos (Field Day has the most pictures and videos of parts of the event). In alphabetical order::

- **MRAC Anniversary Special Event Op** – Images related to any club anniversary special event operations (QSL cards received included)
- **MRAC Club Operations** – This covers business type things like certificates, business cards, forms, flyers, etc. This also includes "formal" license classes.
- **MRAC Field Day Pre 1994** – Anything related to Field Day operations from 1933-1994 (includes Nike Site in Lannon in the 1970s and 1980s).
- **MRAC Field Day 1994-2010** – Anything related to Field Day operations from 1994-2010 at Pioneer Village in Ozaukee County.
- **MRAC Field Day 2011-2015** – Anything related to Field Day operations from 2011-2015 at Konkell Park in Greenfield.
- **MRAC Field Day 2016-** – Anything related to Field Day operations from 2016 to the present at MATC South Campus in the Fire and Police training area.
- **MRAC General History** – Sort of anything not covered in other videos.

- **MRAC Meetings** – Meeting program photos and people presenting.
- **MRAC Members** – Club members at their equipment or other related poses. Also a number of group photos from meetings and public gatherings.
- **MRAC Other Operating Events** – Any operating events not covered in other videos.
- **MRAC Press** – Any press (magazine, newspaper, TV, Internet, whatever).
- **MRAC Public Events** – Public demos of amateur radio like AES and HRO Superfest, Maker Faire, Hamfests.
- **MRAC Repeater** – Things related to the MRAC repeaters.
- **MRAC Social Gatherings** – Breakfasts, dinners, parties, picnics, etc.

Some images may see inclusion in more than one video. A good example is press coverage. There is a video consisting of all press coverage, but specific articles or photos may appear also in Field Day or whatever videos. No we are not trying to pad the videos, just make for a complete storytelling of a subject.

The web site YouTube.com is a site made for video hosting. Currently there is one video from the club on YouTube. That is the anniversary video, ("**MRAC 100 Years**") a 15 minute video with full narration and background music (can be currently found at the link - <https://youtu.be/i947F-Uomg>). As the above videos get a little more polish (music, maybe some narration) they will appear on YouTube also, so be sure to check the "Milwaukee Radio Amateurs' Club" Channel there (who knows what may show up). There could even be other things besides the above videos (like maybe a complete meeting video instead of an excerpt).

# The Amateur's Code

(2015)

For many years, MRAC reprinted "The Amateur's Code" in rosters and other printed material. It has also been printed by the ARRL, QCWA and various other publications. It is reprinted here for your future reference.

## ***The Amateur's Code***

### **ONE**

*The Amateur is Considerate ... He never knowingly uses the air in such a way as to lessen the pleasure of others.*

### **TWO**

*The Amateur is Loyal ... He offers his loyalty, encouragement and support to his fellow radio amateurs, and his local club and to the American Radio Relay League, through which Amateur Radio is represented.*

### **THREE**

*The Amateur is Progressive ... He Keeps his station abreast of science. It is well-built and efficient. His Operating practice is above reproach.*

### **FOUR**

*The Amateur is Friendly ... Slow and patient sending when requested, friendly advice and counsel to the beginner, kindly assistance, cooperation and consideration for the interests of others; these are marks of the amateur spirit.*

### **FIVE**

*The Amateur is Balanced ... Radio is his hobby. He never allows it to interfere with any of the duties he owes to his home, his job, his school, or his community.*

### **SIX**

*The Amateur is Patriotic ... His knowledge and his station are always ready for the service of his country and his community.*

-PAUL M. SEGAL W9EEA (first printed 1928)

# A Historical Timeline

(2019)

## 1836

- Samuel F. B. Morse (an artist), Joseph Henry (a physicist), and Alfred Vail (an inventor) developed a system of sending electrical pulses along a wire controlling an electromagnet to generate clicking sounds representing a “code” to transmit messages.

## 1837

- William Cooke and Professor Charles Wheatstone patent a multi-wire landline telegraph system using multiple batteries along the wire’s path. Their system also did not use sound but a series of needles which pointed to the alphabet printed on charts.

## 1848

- Friedrich Clemens Gerke created what was known as the Continental code or Modern International Morse code which was a variation of the original Morse and Vail developed code. Gerke changed half of the alphabet and all of the numbers from the original code. The original form of Morse code became what is known as American Morse (and was primarily used on landline telegraphs, not radio).

## 1851

- The first Wisconsin State Fair is held in Janesville. It would change cities each year until 1882 when it moved to its current home in West Allis.

## 1859

- “The Carrington Event” - The largest, recorded, geomagnetic solar storm occurs (during solar cycle 10). It was named for astronomer Richard C. Carrington who observed and recorded the event (in the morning of September 1) along with his fellow astronomer Richard Hodgson. It was the result of a coronal mass ejection that traveled directly toward earth at a possible record speed. The results included the loss of all telegraph communication for 2 days, in some cases causing large electric fields to exist on the telegraph wires resulting in sparks and even electric shocks to operators and fires. There also was intense aurora visible even in locations near the equator. The aurora was so bright, birds and humans in some areas thought it was sunrise.

## 1861

- The construction of the first transcontinental telegraph is completed. It connected an existing east coast network to California. It also effectively ended the Pony Express service.

## 1865

- May 17 – The International Telegraph Union (ITU) is established as a standards organization for landline telegraphy. It would later become the International Telecommunications Union.

## 1870

- The US establishes the Weather Bureau (later to become the Weather Service).

## 1876

- March 7 - The first US patent for a telephone (an "apparatus for transmitting vocal or other sounds telegraphically") was granted to Alexander Graham Bell. Over the years there have been disputes over who actually "invented" the telephone. March 10 - Bell transmits the sentence "*Mr. Watson, come here! I want to see you!*" using a liquid transmitter and an electromagnetic receiver to his assistant Thomas Watson.
- The International Telegraph Union (ITU) begins branching out from landline telegraphy by drafting international rules for the new telephone service.

## 1877

- Thomas Edison applies for a patent on a carbon (graphite) transmitter (microphone).

## 1878

- Harry Houdini, his mother and 4 siblings immigrated to the US from Hungary to settle in Appleton, Wi.

## 1882

- The Milwaukee Journal newspaper is founded (November 16).

## 1892

- Due to litigation, Edison's patent on a carbon (graphite) transmitter (microphone) is finally granted.

## 1896

- The first public presentation of a projected motion picture takes place at Koster and Bial's Music Hall in New York City.

## 1897

- The Yerkes Observatory is founded in Williams Bay, Wisconsin by astronomer George Ellery Hale. Hale became known for his discovery of magnetic fields in sunspots and has had a number of large telescopes named after him. It was financed by businessman Charles T. Yerkes who was involved in developing mass transit systems both in Chicago and London, England.

## 1900

- Actor Spencer Tracy is born in Milwaukee.

## 1901

- The Victor Talking Machine Company was formed as a creator of phonographs and phonograph records.
- December 12 – Radio signals (the letter “S” in CW) are received in St. John’s Newfoundland, Canada, as sent by Guglielmo Marconi from Poldhu, Cornwall, England. “Experts” at the time said that radio signals could travel no farther than 200 miles due to the curvature of the earth.
- The College Board administered the first college admissions test which was the forerunner to the SAT (Scholastic Aptitude Test).

## 1902

- Horace G. Martin patented an electro-mechanical sending device, the Martin Autoplex (which used batteries). The reason for the invention was to help prevent “glass arm” (carpal tunnel syndrome in today’s terms) in telegraph operators using a straight key for long periods of time.

## 1903

- Oscar Werwath forms The School Of Engineering (later to become the Milwaukee School Of Engineering – MSOE).
- William Harley and Arthur Davidson begin selling their motorcycles from a 10 x 15 foot shed in Milwaukee.
- Italy suggests the use of “SSSDDD” as an international distress call using CW.

## 1904

- The United Electrical Manufacturing Co. was formed by Horace G. Martin and a group of others. Martin also received another patent for another electro-mechanical sending device. This version did not need batteries. This was the first version of a Vibroplex bug.
- J. A. Fleming develops the 2 element vacuum tube (diode).
- Commercial shipping in the Atlantic Ocean began employing former landline telegraph operators for the new “wireless”.
- The British Marconi Company adds the letter “D” to the general call “CQ” to signify a distress call (“CQD”).

## 1905

- Germany suggested “SOE” as a distress call as its ships had been using this for some time. Meanwhile the United States suggested “NC” which was a call for help in flag signaling.

## 1906

- The Boys Technology and Trade School (later to become Boys Technical High School and then Bradley Tech High School) is founded on the near south side of Milwaukee. Its first building was donated by Henry Harnishfeger at the northeast corner of 1<sup>st</sup> and Oregon St.
- Lee deForest develops the 3 element vacuum tube (triode).
- The suggestion of “SOE” for distress is changed to “SOS”. That proposal is adopted by the British Marconi Society and the German Telefunk organization at the Berlin Radio Convention in October.

## 1907

- Lieutenant Douglas MacArthur is assigned to an Army Corps of Engineers district office in Milwaukee where his parents are living at the time.
- The Junior Aero Club of U.S. was founded in New York City.

## 1908

- The United Electrical Manufacturing Co. went out of business. Horace G. Martin then partnered with J. E. Albright to sell the Vibroplex, a new mechanical telegraph key, eventually earning the nickname of “bug”.
- April – The first issue of the magazine “Modern Electrics” was published by Hugo Gernsback. This is the first magazine published covering the topics of electronics and radio (wireless at the time).
- Dutch physicist Heike Kamerlingh Onnes liquefies Helium making it possible to study matter at extremely low temperatures. In 3 years he will advance to the discovery of superconductivity (materials which are normally insulators, conducting electricity at extremely low temperatures).
- General Motors is formed in Flint, Michigan.

## 1909

- The Junior Wireless Club Limited was formed by members of the Junior Aero Club of the United States.
- The Radio Society of the Institute for Geographic Exploration is formed at Harvard University. One year later the group changes its name to the Harvard Wireless Club.
- The San Francisco Radio Club forms.
- William T. Purdy and Carl Beck write the song “*On Wisconsin*” and premiere the song at the University of Wisconsin in Madison.

## 1910

- The Wireless Institute of Australia is formed.
- The Georgia Tech Amateur Radio Club is formed at Georgia Tech University.
- The Hammarlund Manufacturing Co. is formed in New York City by Oscar Hammarlund to produce variable capacitors and other electronic components. Radios come later.
- Emil Seidel becomes the first Socialist Mayor of the city of Milwaukee (term 1910-1912).

## 1911

- Clarence Crapo 9VD begins on the air operations in Boston. Clarence would soon move to Milwaukee and become the second President of MRAC.
- The Junior Wireless Club Limited changes its name to the Radio Club of America.
- The first Indianapolis 500 race is held.

## 1912

- Congress passes the Radio Act of 1912, licensing amateur radio operators and restricting them to wavelengths shorter than 200 meters (frequencies greater than 1500 KHz). This was in part to prevent hams from interfering with government radio stations. Another big reason for the frequency allocation is no one believed that anything higher than 1.5 MHz would be of any value. Lastly, the thinking was that since the frequencies were useless, amateur radio would soon just fade away as hams would grow tired of trying to operate on the “useless” frequencies.
- Per the Radio Act of 1912, the Department of Commerce will oversee radio (and amateur radio) operations.
- Amateur Radio call signs will now be government assigned. Previously, hams made up their own call signs (often a person’s initials).
- The Amateur Radio service is created with two classes of licenses, First Grade and Second Grade. First Grade required a written essay examination and a code test of 5 words per minute. The test was administered before a “Radio Inspector” at a Commerce Department Field Office. The Second Grade license was for people who could not appear at a Commerce Dept. Field Office. An existing Amateur Radio First Grade licensee would administer the test.
- The Hamilton Radio Club is formed in Hamilton Ohio.
- Texas A&M University Radio Club is formed.
- The Albany (New York) Amateur Radio Association is formed.
- The Institute of Radio Engineers (IRE) is formed in New York.
- The E. B. Heath Aerial Vehicle Company is formed by Edward Heath to sell airplane kits. The company would eventually become the Heath Company selling electronic (especially amateur radio) kits.
- Arizona becomes the 48<sup>th</sup> state.
- April 14 - The British steamship Titanic hits an iceberg and sinks during its maiden voyage from Southampton, England, to New York. Prior to this event, ships were not required to have radiomen on duty throughout the day. After the accident 24 hour coverage was required as well as the establishment of a maritime distress frequency (500 Kc).

## 1913

- The Wireless Association of Cambridge (Ohio) was formed – December 4. It later changed its name to the Cambridge Amateur Radio Association.
- The London (England) Wireless Club is formed (July 5). In 1922 the group will change its name to the Radio Society of Great Britian (RSGB).

## 1914

- The School Of Engineering (later to become Milwaukee School Of Engineering – MSOE) amateur radio club is formed. The call sign was 9SO (later W9SO and then W9HHX as it is today).
- January 14 – The Radio Club of Hartford (Ct.) is formed.
- May 18 - The American Radio Relay League was formed by Hiram Percy Maxim 1AW and Clarence Tuska 1WD who was the Secretary of the Radio Club of Hartford.
- The University Of California, Berkeley Amateur Radio Club is formed.
- The National Toy Company was formed. It would later become National Radio Company.
- The National Radio Institute was founded by James E. Smith in Washington D.C.
- U.S. Post Office begins delivering mail using government cars (instead of personal vehicles).
- War breaks out in Europe (the start of World War I).

## 1915

- The first issue of QST is published by the ARRL.
- The Vibroplex Company was incorporated in New York.
- Nippon Radiotelegraph Manufacturing & Co. is founded. This company will become JRC – Japan Radio Corporation in 1942.
- Alexander Graham Bell and his now former assistant Thomas Watson complete the first coast to coast long distance telephone call. Vacuum tube based repeaters were employed to span the distance.
- George “Orson” Wells (actor, writer, director, producer – stage, radio, film, TV) is born in Kenosha, Wisconsin.

## 1916

- January - The San Francisco Radio Club reforms after disbanding earlier.
- The Santa Cruz County Amateur Radio Club is formed (but it would not have a record of continuous activity, until about 1945).
- The South Jersey Radio Association is incorporated (June 12).
- The Radio Club of Tacoma (Washington) is formed (October).
- Daniel Webster Hoan becomes the second Socialist mayor of the city of Milwaukee (term 1916-1940).

## 1917

- **January—The Milwaukee Radio Amateurs' Club was formed by Dr. Loy Schell Hillegas-Baird 9HO, A. C. Kletzsch Jr., J. B. Hitz, and Alonzo Pawling.**
- The first MRAC meetings were held in the Trustee's Room of the Milwaukee Public Museum.
- Clarence Crapo 9VD moves from Boston to Milwaukee. Clarence will become one of the first crop of club members, and will become the club's first Vice President and then second President.
- May 26, the St. Cloud Mic and Key Club is formed in Minnesota.
- The U.S. declared war on Germany.
- Radio Amateurs are ordered off the air due to the war.
- ARRL closes down for the war.
- Hammond Manufacturing is founded in Canada. Over the years Hammond will manufacture radio receivers, metal and plastic enclosures (which it still does), audio and power transformers and amateur radio equipment.
- Congress passed the Espionage Act, providing a \$10,000 fine and 20 years in prison for anyone who encouraged disloyalty or interfered with the draft.
- The Federal Trade Commission was established.
- U.S. purchases the Virgin Islands from Denmark.
- UW-Madison professor Earle M. Terry founded the university's broadcast radio operations using the call letters 9XM. This would turn into the radio station WHA and Wisconsin Public Radio network.

## 1918

- The Milwaukee Radio Association disbands. Its membership is absorbed by MRAC.
- March 13 – The Federal Government decides to legislate time. This was the start of daylight savings time.
- October—the Influenza Epidemic strikes 1/4th of all U.S. citizens. War assembly plants were shut down and panic spreads from coast to coast.

## 1919

- **MRAC became affiliated with the ARRL (December 5). Request letter was sent October 24, 1919. MRAC was the seventh organization affiliated (out of a group of 10). By 1970 the 9 other affiliated clubs (from December 5, 1919) had possibly disappeared, making MRAC the longest and oldest affiliated club.**
- January 3, 9XM in Madison, Wisconsin begins radio broadcasts of weather reports. 9XM would eventually become WHA radio.
- Herbert Tautz forms the Delta Specialty Company in his garage in Milwaukee to manufacture small tools and later light industrial machinery. The company would later become Delta Machinery and then Delta Power Equipment Company (makers of the Unisaw among other power woodworking tools although not located in Milwaukee for some time).
- Empire Level is founded in Milwaukee.
- The Austin Amateur Radio Club became affiliated with ARRL also in December. They were founded around the same time.
- The Peoria (Illinois) Amateur Radio Club is formed.
- Ban on amateur radio because of World War I was lifted (October).
- Hiram Percy Maxim, founder of the ARRL, made the first major push to affiliate radio clubs across the country (see above).
- The Radio Corporation of America (RCA) is formed by General Electric (GE) after negotiations with the US government to have GE buy the American Marconi Company (the US based affiliate of the British Marconi Company) and create a company to develop long distance radio communications for use exclusively by the US Army and Navy.
- Ratification of the 18th amendment (January 16) to the constitution on prohibition - outlawing liquor, created turmoil.
- Captain John Alcock and Lt. Arthur Whitten Brown fly the first non-stop flight from Newfoundland to Ireland across the Atlantic Ocean.
- Władziu Valentino Liberace (“Liberace”) was born in West Allis, Wi.

## 1920

- MRAC holds meetings in a lecture room in the OLD Insurance Building through the courtesy of the School Of Engineering.
- MRAC dues are \$0.50 per month for Member and Associate (not licensed) members and \$0.25 per month for Junior (under 18) members.
- All MRAC members must join ARRL (ARRL dues were \$2).
- The Wisconsin Radio League folds and its membership is absorbed by MRAC.
- The South Jersey Radio Association becomes affiliated with ARRL (April 9, 1920).
- The MIT Radio Society of Cambridge Massachusetts becomes affiliated with ARRL (April 14, 1920).
- October, commercial (corporate, not amateur) radio broadcasting begins when Dr. Frank Conrad applies for a commercial broadcasting license. On October 27 a license is granted to the Westinghouse Broadcasting System.
- Nov. 2, 8ZZ in Pittsburgh, Pennsylvania broadcasts the results of the Harding – Cox presidential election. Later the call sign would be KDKA, often reported to be the first commercial broadcast radio station (commercial maybe, but not broadcast in general, see 1919 for one example).
- Tucson, Arizona inaugurates the first municipal airport in the country.

## 1921

- MRAC meets almost every Monday (except for the 3<sup>rd</sup> Monday of each month) in the Trustee's Room of the Milwaukee Public Museum.
- The first ARRL National Convention is held in Chicago.
- The first transatlantic Ham QSO takes place between Greenwich Connecticut and Ardrossan Scotland.
- Harold H. Beverage receives a patent for a radio receiving system utilizing a "wave" antenna (a very long wire – at least one or two wavelengths long). The antenna subsequently was named for Beverage (and not for liquid refreshments).
- Theodore and Milton Deutschmann open the retail store and mail order business, "Radio Shack" in Boston, to sell parts and equipment to radio amateurs and maritime radio operators. The store was named "Radio Shack" after the ship board room where radio officers operated.
- Professor Albert Einstein introduced "Time" as the fourth dimension to his theory of relativity.
- The Master Lock Company is founded in Milwaukee by locksmith and inventor of the laminated padlock, Harry Soref and two friends, partners, and investors, P.E. Yolles and Sam Stahl.
- Iowa became the first state to impose a tax on cigarettes.
- The first "Miss America", 16 year old Marcia Gorman of Washington D.C. was crowned in Atlantic City, New Jersey.

## 1922

- MRAC starts its first formal code and radio building classes.
- MRAC members are still using spark transmitters but agree to stay off the air until after 10:30 PM to minimize interference to new broadcast stations.
- MRAC dues are \$0.50 / month (that's equal to \$69.00 for a year in 2007 money or \$82.92 in 2013 money) with a \$1.00 (\$11.50 in 2007 money or \$13.82 in 2013 money) initiation fee.
- Broadcast radio station WIAO goes on the air at the Milwaukee School of Engineering on a frequency of 833.3 Kc (or 360 meters as was custom at the time) with a power of 100W.
- The Lincoln Memorial was dedicated in Washington D.C.
- In November, the London Wireless Club changes its name to the Radio Society of Great Britain (RSGB).
- Daily radio broadcasting of music and news was scheduled in New York City. Crystal headphone receiving sets were selling rapidly.
- Warren G. Harding became the first President with a speech broadcast over radio. Baltimore station WEAR broadcast the speech which was dedicating the Francis Scott Key memorial at Fort McHenry.
- April 4 – New broadcast radio stations will be assigned a 4 letter call sign beginning with the letter “K” if west of the Mississippi River and “W” if east of the river. 3 letter call signs were in use earlier and were grandfathered in.

## 1923

- March 10 – MRAC is incorporated in Milwaukee County (with the state of Wisconsin).
- The South Side Radio Club and the West Allis Radio Club were formally asked to merge into MRAC. Both declined (primarily due to the distance required to travel to downtown MRAC meetings and the requirement to join ARRL to be an MRAC member, both requirements cited as hardships) and both would soon dissolve (West Allis would reform in 1954). Individual South Side club members would however join MRAC.
- Between the club mergers and membership committee action, MRAC picked up 97 new members during the year.
- May 15 – All amateur licenses issued after this date would bear the words prohibiting transmission in the evening between the hours of 7:30 PM and 10:30 PM.
- Department of Justice officials asked all amateurs to voluntarily change from spark to CW transmissions.
- Another new license class was created, the Amateur Extra First Grade. This license conveyed additional operating privileges, after passing a more difficult written examination and a code test of 20 words per minute.
- E.F. Johnson Company was founded as a mail order supplier of electronic parts.
- The Navy Research Lab (NRL), a research laboratory operating under the command of the US Navy, begins operations at 11 AM, July 2.
- Time magazine was founded.
- The first Schick electric shaver was sold.

## 1924

- The Milwaukee Journal started a regular column in their newspaper called "HamChatter" dealing with amateur radio and specifically MRAC news.
- MRAC has CW classes and radio theory classes weekly.
- The Milwaukee School of Engineering Amateur Radio club changes its call sign to W9HHX, still in use today.
- MSOE's broadcast radio station WIAO changes frequency to 1220 Kc (246 meters) and its call letters to WSOE. At this point the Wisconsin News, a local newspaper owned by the Hearst Corp. began part time programming of the radio station.
- Amateurs using phone transmissions were warned to stop or they would lose their license, only CW was legal at the time.
- Amateurs are given the 80, 40, 20 and 5 meter bands. 40 is the second harmonic of 80 and 20 is the second harmonic of 40.
- Daly's Pen Shop opens in downtown Milwaukee.
- Milwaukee Electric Tool was formed by A. J. Siebert in Milwaukee.
- A patent for the first powered handsaw was issued to Edmond Michel of New Orleans, Louisiana. This was the beginning of the Skilsaw brand.

## 1925

- MRAC starts its own newsletter following the format of a small magazine. The publication is called the Badger ARRL News. Hams from all across the country joined the club to receive the "News".
- MRAC has first QSO Picnic. Location was Delafield.
- MRAC begins collecting radio equipment, components, and assorted papers to be displayed at the Milwaukee Public Museum.
- The Milwaukee Journal presented medals to 3 MRAC members (Fred Catel 9DTK – Gold, C. E. Miller 9SR – Silver and Carl Hatch 9BBY – Gold) for the highest traffic totals for the month of May.
- IARU – International Amateur Radio Union founded in Paris. Hiram Percy Maxim W1AW becomes the first IARU President (Maxim organized the Paris meeting where IARU formed).
- The Army Amateur Radio System was formed. This is what would become "MARS" (Military Affiliate Radio Service).

## 1926

- MRAC has members in all 48 states due to the popularity of the "Badger ARRL News" newsletter. The newsletter contained diagrams on crystal oscillators and other up to date radio circuits that could be built.
- MRAC dues were \$5 for residents and \$1 for non-resident (\$58.69 and \$11.74 in 2007 dollars)!
- MRAC sponsors the "Badger Ham Roundup" on June 12. Most activities take place at the Journal Building with a luncheon at Gimbels Grill Room and banquet at the Hotel Maryland (4<sup>th</sup> and Sycamore St). \$2 admission covers everything except the luncheon.
- Herb Wareing 9NY was made an Honorary Member of MRAC
- General Billy Mitchell begins to establish a modern military air power.
- Henry Ford starts offering his cars in other colors besides black. He also introduces the 8-hour work day and 5 day work week to the auto industry.
- The first multiple choice SAT (Scholastic Aptitude Test) for college admission testing was administered.
- The "mechanical television" or "televisor" was demonstrated by John Logie Baird (no relation to any MRAC Bairds (I think – ed.)), in England.
- NBC organizes the first nationwide radio broadcast network. The 3 musical notes which make up the NBC theme are the musical notes G, E, and C, standing for the General Electric Company which formed RCA at the request of the US government. RCA is the parent of NBC (some people say the musical note connection is not true, others say it is).

## 1927

- MRAC organizes two baseball teams, the "Key-Klickers" and "Brass Pounders".
- The Racine (Wisconsin) Megacycle Club (amateur radio club) is formed.
- President Calvin Coolidge signs the "Radio Act of 1927" creating the Federal Radio Commission. The commission would have five people.
- The existing Amateur First Grade license is renamed the Amateur Class license.
- The International Radiotelegraph Conference as held in Washington DC (11/25/27) resulted in a new 10M amateur band covering the frequencies of 28.0 – 30.0 MC.
- Also at the International Radiotelegraph Conference the call sign prefixes of W, K, N, and partial use of A are assigned to the United States for use in identifying ALL radio stations (commercial as well as amateur).
- Radio station WSOE changes frequency again (this time required by the new government agency, the Federal Radio Commission) to 1110 Kc (270 meters). The station is also now required to share time with WHAD and to reduce power from 500 to 250 W. In November the station is purchased from the school by the Wisconsin News newspaper which had been sharing in the programming of the station. The school continues to operate the station after the purchase.
- Radio station WTMJ ("The Milwaukee Journal") goes on the air.
- The first iron lung is used.
- Charles A. Lindbergh reaches Paris by air in 33 hours and 29 minutes.
- Philo Farnsworth files for a patent on the first all-electronic television system.
- The first talking motion picture is produced.
- TV's first successful long distance transmission is made. It spanned Washington D.C. to New York City using telephone lines from AT&T. The transmission consisted of Commerce Secretary Herbert Hoover's comments on the event of the new technology (the Commerce Department oversaw the airwaves at the time, as the FCC didn't exist yet).
- The Victor Talking Machine Company of Japan, Limited, (JVC) a subsidiary of the United States' Victor Talking Machine Company, was formed.
- There were approximately 30,000 licensed radio amateurs in the US.

## 1928

- MRAC installs a club station at the Coast Guard Station at McKinley Beach.
- MRAC sponsors the first ARRL Central Division Convention, held at the Milwaukee Republican Hotel, Friday thru Sunday, May 25 – 27 (April 21 – 22 was the preliminary planned date).
- The MRAC membership committee headed up by E. G. Nickel, W9ETO reports 29 new members joined during the year.
- The Radio Commission starts testing for "Amateur First Grade" licenses.
- Radio station WSOE changes frequency again to 1120 Kc (267 meters) and changes its call letters to WISN ("WISconsin News").
- The Allied Radio Corporation is formed in Chicago as the radio parts distribution division of Columbia Radio Corporation.
- Paul V. and Joseph E. Galvin start Galvin Manufacturing Corporation in Chicago to produce battery eliminators to power portable battery powered radios on AC. This company will become Motorola in later years.
- Commander Byrd Expedition is in progress to the South Pole. Byrd had amateur radio equipment along.
- Walt Disney releases the first Mickey Mouse cartoon called "Plane Crazy" and also the first cartoon with sound.

## 1929

- MRAC buys code practice equipment to teach large classes.
- Construction is started in Milwaukee on one of 25 airport projects across the country by new airplane manufacturer, Curtis-Wright.
- January – The US Government issues new regulations for amateur radio covering frequency accuracy and distinct amateur bands with an ultimatum – meet the new regulations or surrender frequencies and privileges.
- The Radio Corporation of America (RCA) acquires a controlling interest in the Victor Talking Machine Company.
- Al Capone's infamous St. Valentines Day Massacre takes place in Chicago in a Lincoln Park garage.
- The U.S. Stock Market crashes (for the first time).
- The first public broadcast television transmission to the general public took place in Crystal Palace, London, England by the BBC using an electro-mechanical TV system.

## 1930

- MRAC continues with annual picnics and code & theory classes.
- The Chicago Northwestern Railway asked for a list of club members who could be called if they had an emergency. Seven MRAC members volunteered.
- Herb Wareing W9NY joins the Milwaukee Police Dept. as head of the department's radio section. At the time the department had radio receivers (no transmitters) in 16 squad cars.
- ARRL Official Observer Stations were established to watch for Hams operating outside the bands.
- July 6 – The new airport constructed by the Curtis-Wright Corporation in Milwaukee is dedicated. It is initially known as Curtis-Wright Field (WC in airport code). In 1959 the airport will be renamed to Lawrence J. Timmerman Field.
- The General Electric Company is forced to sell its stake in RCA and NBC due to US government antitrust charges. Interesting considering that GE was asked to form RCA by the very same government some years earlier (and they then bought them back many years later).
- Galvin Manufacturing Co. introduces the first automobile broadcast radio receiver with the brand name of "Motorola".
- Galvin Manufacturing Co. also begins selling specialized car radios to Police departments nationwide (November).
- Albert Einstein arrives in the U.S. from Germany.
- The existence of the planetary body Pluto is confirmed.

## 1931

- MRAC members start building 5 meter equipment, 56 Mc (i.e.: 56 MHz).
- The Milwaukee Journal ends "HamChatter" in the newspaper. However, they granted the club time to broadcast information over WTMJ-AM radio.
- The I.R.E. (Institute of Radio Engineers) held a convention June 4-6 in Chicago. Club members were encouraged to attend.
- Arthur Collins W0CXX begins Collins Radio Company in his basement (it becomes a more established company in two years).
- Herbert Hoover signed an Act making "The Star-Spangled Banner" the national anthem.
- The C. F. Martin Company released the model D-28 dreadnaught style acoustic guitar, the first dreadnaught style guitar produced under their own name (having previously produced a model under a private label for a music store that did not sell well).
- Al Capone is convicted of income tax evasion (the only charge the government could make stick against the mob leader).
- Thomas Edison dies.

## 1932

- MRAC begins using motion pictures for training and entertainment at meetings.
- The Amateur Class license class is renamed the Amateur First Class license.
- William Halligan founds the Hallicrafters Co. in Chicago, Illinois.
- The Milwaukee Astronomical Society is formed by Luverne Armfield and 17 other charter members.
- The Polaroid Land instant camera is invented.
- Amelia Earhart becomes the first woman to fly solo, nonstop from coast to coast (Los Angeles Ca. to Newark NJ.)
- Franklin Roosevelt is elected president, he pledged the "New Deal" for all Americans.
- The German electronics and test equipment company Rohde and Schwarz is formed by Lothar Rohde and Hermann Schwarz.
- The School Of Engineering becomes a non-profit corporation and changes its name to the Milwaukee School Of Engineering (MSOE).

## 1933

- MRAC sponsors a 5 meter QSO party for Friday Oct. 13 between 6 PM and Midnight.
- MRAC sponsors a 40 meter QSO party for Nov. 17 between 7 PM and 11 PM.
- MRAC sponsors a 10 meter QSO party Dec. 10 between Noon and 10 PM.
- ARRL starts the contest / event Field Day. MRAC participates in the very first and has ever since.
- Many MRAC members attend the "Chicago World's Fair" for radio demonstrations.
- MRAC also works with the Chicago Area Radio Club Council.
- In conjunction with the Chicago World's Fair, Chicago (via the World's Fair Radio Amateur Council) is hosting the World-Wide Amateur Convention. MRAC's own Herb Wareing will be giving a technical presentation at the convention.
- The Starved Rock Radio Club is formed in North Central Illinois.
- The Hamfesters Radio Club is formed in Illinois.
- Arthur Collins W0CXX (also 9CXX and W9CXX) incorporated the Collins Radio Company in Cedar Rapids Iowa (moving the company out of his basement) producing shortwave and AM broadcast equipment.
- The U. S. Government offered training programs in radio and other fields in an effort to get people to sign up for the "Army or Navy Volunteer Reserve".
- The 21<sup>st</sup> amendment (December 5) which repealed the 18<sup>th</sup> amendment Prohibition (the ban on alcohol) is passed. This is the only time (at least up to now – 2019) in history one constitutional amendment is proposed to repeal another.
- Adolph Hitler is appointed Chancellor of Germany.

## 1934

- February 25, MRAC sponsored a 20M QSO Party. The contest would take place between the hours of 6 AM and 6 PM with points awarded based on distance of contacts made in increments of 1000 miles (with no points awarded for contacts within Milwaukee County). The contest was rescheduled to March 4 due to no meeting at the end of February due to the meeting location being unavailable (the Museum being closed for Washington's Birthday).
- In June 1934 MRAC had 63 members.
- The Wausau Radio Operators Club (later to become the Wisconsin Valley Radio Association) is formed in Wausau Wisconsin.
- The first "Hamfesters" hamfest takes place in Illinois.
- The "Worked All Zones" (WAZ) award is started by R/9 Magazine.
- Congress creates the Federal Communications Commission (FCC) replacing the Federal Radio Commission. At this time the new FCC also gained regulatory power over common carriers (telephone and telegraph companies) which previously were regulated by the Interstate Commerce Commission.
- The first federal prisoners are assigned to Alcatraz prison located in San Francisco Bay.

## 1935

- MRAC begins on the air code practice on 160 M. These continue until 1941.
- MRAC's founder (Dr. L. S. Hilegas Baird) gets tuberculosis and is confined to a sanatorium.
- Bootleg 5 meter stations become a problem.
- ARRL creates the "ARRL Emergency Corps".
- National Radio Company introduces the HRO receiver.
- The Hammond Model "A" electronic tonewheel organ is introduced.
- Congress enacts Social Security.

## 1936

- MRAC (as part of the Chicago Area Radio Club Council) helps to stage another ARRL Central Division Convention, this time in Chicago.
- Hiram Percy Maxim, ARRL founder dies.
- Walt W3NPS and Bill W8IFD Good (identical twins) developed and flew the first radio controlled model airplanes.
- Hammarlund Manufacturing Co. introduces the first in its "Super Pro" receiver line, the SP-10.
- The Marquette University football team (yes, football), the Golden Avalanche, accepted an invitation to play at the first Cotton Bowl college bowl game. The team lost the game 16-6, to the Texas Christian University Horned Frogs.
- Nylon stockings for women went on sale for the first time.
- The Olympics are held in Germany. Hitler expected the games to be a show place to prove the superiority of the Nazi system. As a result the Olympics featured the first live television broadcast of a sporting event.

## 1937

- At the 14<sup>th</sup> annual MRAC QSO Stag Party, held at the Milwaukee Athletic Club, attendees were offered the opportunity to “enlist” in the US Naval Communication Reserve. Wisconsin has 280 spots available. Qualifications include, be between the ages of 17 and 35, and possess an amateur license or ability to copy 16 words per minute of Morse code.
- ARRL introduces the DXCC awards program. When 75 countries are worked an amateur was listed in QST. When they had 100 countries worked a certificate was awarded.
- Howard Hughes established a transcontinental flight record.
- The Golden Gate Bridge is dedicated in San Francisco.
- Amelia Earhart makes her last flight.
- The first Dr. Seuss book, “*And to Think That I Saw It on Mulberry Street*” is published.
- The radio drama “*The Shadow*” premieres starring Orson Wells (who was born in Kenosha). His starring role was uncredited.

## 1938

- The MRAC 15<sup>th</sup> annual “QSO Party” (not an on-the-air thing, but a social event) had an attendance of 327! The total net proceeds from the party was a -\$2.40. Also of note were the 5 ½ barrels of beer which were consumed!
- Amateurs gain the 2.5M and 1.25M bands (US only). However amateurs worldwide lose the exclusive use of 40M which is opened up to shortwave broadcasting.
- Nazi Germany takes over Czechoslovakia.
- Walt Disney's "Snow White and the Seven Dwarfs" is the top money making movie of the year.
- October 30, “*The War of the Worlds*” was performed on radio by the “*Mercury Theater of the Air*”, starring Orson Wells. There were reports of real public panic after people hearing the show in the format of news bulletins and believing the reports were true.
- William Hewlett and David Packard begin working together part time in a rented garage in Palo Alto California developing electronic test equipment.

## 1939

- MRAC sets up a booth at the Wisconsin Hobby Exposition at the Auditorium.
- MRAC dues are \$0.25 / month (yes monthly).
- MRAC Meetings are held at the Milwaukee Public Museum.
- Prior to each MRAC meeting code classes were conducted by Fred Lambrecht W9YEG.
- MRAC has 72 members.
- The 16<sup>th</sup> annual MRAC sponsored “QSO Party” at the Milwaukee Athletic Club had 278 Wisconsin hams in attendance. This year the club made a profit of \$27.66 and used only 4 ½ barrels of beer.
- MRAC sponsors a 5 meter hidden transmitter contest.
- MRAC provides communications between the official timers for the September Curtis-Wright Airport Air Races.
- The Wisconsin Valley Radio Association is formed in Wausau Wisconsin from the Wausau Radio Operators Club.
- The first Starved Rock Radio Club Hamfest is held in Princeton Ill.
- Galvin Manufacturing Co. begins selling a line of AM mobile two-way radios for use by public service agencies.
- FDR is the first President on TV over the NBC experimental channel.
- Scientists split the atom.
- Germany invades Poland.
- DuPont introduces nylon stockings for women.
- August 12 – The movie “The Wizard of Oz” starring Judy Garland, has its world premiere at the Strand Theater in Oconomowoc Wisconsin, 3 days before premiering in Hollywood. The producers wanted to test the movie in the Midwest and Oconomowoc was selected.
- William Hewlett and David Packard decide to make their partnership official. They form The Hewlett Packard Company (the exact name – which name would come first – is determined by a coin flip). The first product is the HP200 audio oscillator. The first major customer was the Walt Disney Company which wanted the oscillators to help theaters setup their facilities for the showing of the movie “*Fantasia*”.

## 1940

- MRAC sponsors the Wisconsin State ARRL Convention at the Schroeder Hotel (June 15, 16).
- Any MRAC member who conducts the code classes prior to MRAC meetings will not have to pay dues for the year.
- ARRL creates the DXCC Honor Roll for those with the most countries worked.
- The National Television System Committee (NTSC) was formed by the FCC to work out standards for the introduction of television (analog at the time) to the country.
- Dr. Vladimir K. Zworykin demonstrates the first electron microscope.
- U.S. cipher experts use a technique they called "Magic" to break the Japanese secret diplomatic code.
- FDR is elected for his third term (the last President to be able to do so).
- The 40 hour work week became law created by the "Fair Labor Standards Act" of 1938.
- *"The Adventures of Superman"* serial debuted on radio.
- The first helicopters take flight.
- Carl Zeidler, a Democrat, is elected mayor of the city of Milwaukee.

## 1941

- With a number of members going into the armed forces due to the war, MRAC members still in Milwaukee record a series of 78 rpm records to send audible greetings to members overseas.
- MRAC organized a bowling party for December 6.
- December 8—MRAC worked with the Mayor's office to set up a state-wide and local civil defense program.
- MRAC withdraws from the Chicago Area Radio Council (possibly due to the membership fee involved).
- MRAC investigates the possibility of Life memberships.
- MRAC-UHF Emergency Corps has their first meeting with a topic of the defining of equipment connector standards for portable equipment interoperability in time of emergency.
- F. E. Handy W1BDI, Communications Manager of ARRL attends a dinner party thrown by MRAC in his honor Oct. 29 at the Schlitz Brown Bottle.
- The ARRL is flooded with requests from the government for technical men needed on National Defense projects. Special registration blanks were included in the December QST. The government was looking for specialists with radio experience to replace civilian workers that have been called into the service or to a defense post.
- Galvin Manufacturing Co. introduces the first FM two-way radios for public service agencies.
- A coaxial cable based telephone system containing 480 channels was placed in operation from Minneapolis, Minn. to Stevens Point, Wisconsin. This was the largest capacity telephone cable in operation at the time.
- December 7—the Japanese attack Pearl Harbor.
- The Red Cross suggested that club members form a group to take First Aid instructions.
- Rubber tires are the first items to be rationed due to the war.
- FCC licensed 10 commercial television broadcast stations (May 2). The first commercial television station, WNBT began broadcasting July 1. WNBT eventually changed its call letters to WNBC.

## 1942

- MRAC members start the War Emergency Radio Service in Milwaukee. Stations required a special license to operate on 2 1/2 meters with a maximum input power of 25 watts. Stations were located at all city of Milwaukee Police stations.
- MRAC has 74 members (12 in the Armed Forces).
- MRAC sends one carton of cigarettes to each member in the Armed Forces.
- MRAC members still in Milwaukee record a “greetings from home” record which is sent to members in service overseas. The record was sent to one member who then sent it on to another member and so on.
- MRAC holds a bowling party (Feb. 28) at the Badger Alleys, 27<sup>th</sup> and Walnut St., reserving the entire second floor for the club. A fee of \$0.25 above the alley fees is charged to all attending.
- MRAC member Sid Rose W9VKC is working at a FCC monitoring station in Ferndale, Michigan.
- After years of lobbying by Herb Wareing W9NY, the city of Milwaukee approves \$49,651 to begin installing 2 way radio equipment in police vehicles. Milwaukee is the last US city with a population of more than 500,000 to do so.
- Jan. 15—All amateurs go off the air. (The military has sole use of the amateur frequencies).
- Signal Corps is actively looking for radio operators.
- March 15—Marine Corps offered a qualified radio man a rank of Staff Sergeant and \$72 per month to join up.
- April—Raytheon Tube Company is recruiting radio men for training on microwave radio defense systems (Radar).
- June – Per ARRL suggestion, the FCC creates the War Emergency Radio Service. MRAC will get heavily involved with this (see above).
- “Radio City”, the studios and headquarters of WTMJ radio is constructed on Capitol Dr. and Humboldt Ave in Milwaukee.
- Nippon Radiotelegraph Manufacturing & Co. changes its name to Japan Radio Company Ltd (JRC).
- Gasoline rationing goes into effect.
- U.S. wins battle at Midway Island.
- The Cubical Quad antenna is developed by Clarence Moore, chief engineer for shortwave radio station HCJB in Ecuador.
- Carl Zeidler, Mayor of Milwaukee, resigns the job of Mayor to fight in World War II. He became an officer in the Navy Reserve and asked for a dangerous job on a ship and was assigned to man a gun battery on board the merchant ship SS La Salle. The ship was reported lost off the coast of South Africa on December 11. He was officially presumed dead on November 7, 1944.

## 1943

- MRAC buys 5 Series F war bonds.
- Club meetings were held every Thursday at the Milwaukee Public Library. Many times only 6 - 8 attended (due to members being in military service for the war), but it kept the club active.
- MRAC's Erwin Kreis W9HRM, Tommy Gettelman W9IZO, and Charlie Meyer W9GVL create and send out monthly newsletters to club members in the armed forces to let them know what is going on at home.
- Robert Lloyd Drake Sr. founds the R. L. Drake Company in Ohio to produce low pass and high pass filters for the US government and the amateur radio market.
- January 7 – Nikola Tesla, inventor/engineer passes away.
- A new form of mold on cantaloupe is discovered that yields 10 times the amount of penicillin as previous sources.
- Roosevelt and Churchill decide that "Unconditional Surrender" will be demanded from all enemies in the war.
- The IRS created the W-2 form for tax withholding.
- Incendiary bombing starts a new phenomenon, the "Intense Fire Storm" warfare is born.
- Paperback books are introduced.
- Hitler starts using the Buzz Bomb (Over 9000 were used).
- The V-2 rocket began use. The first V-2 went out of control and landed in Sweden. Its remains were quickly recovered and sent to the British.

## 1944

- MRAC members construct and install 23 fixed stations for the War Emergency Radio Service (WERS) throughout Milwaukee. Stations were "sponsored" by various hams with Tom Gettelman W9IZO providing wood for antenna supports for all stations.
- WERS stations are tested every Wednesday by sending simulated traffic.
- MRAC sends a poem to ARRL Secretary K.B. Warner in congratulations of his 25 years of service to the ARRL.
- MRAC newsletters (called Bulletins) are mailed to 55 club members in the armed forces stationed in various locations throughout the world during the war.
- MRAC Bulletins regularly reported on the situations and locations and deployments of members stationed away from Milwaukee.
- The Post Office issues a commemorative stamp marking the centennial of Samuel Morse' successful demonstration of the electric telegraph. MRAC newsletters (Bulletins) for the month of June were mailed using the limited supply stamps.
- MRAC has only one Life Member, Don Seibel xW9ESF.

## 1945

- MRAC members terminate their efforts with the War Emergency Radio Service and take the antennas down.
- Amateurs can go back on the air – gradually. The 2.5 meter band is opened up August 21.
- Hams are given allocations in the new “microwave” bands at 2.3-2.45 GHz, 5.25-5.65 GHz, 10-10.5 GHz, and 21-22 GHz (November 15).
- Reuben Merchant W2LFG and A. Harrison W6BMS completed the first QSO on 5.3 GHz on the day hams were granted the band.
- CQ Magazine publishes its first issue in January with a cover price of \$0.25. John H. Potts is the first Editor and Sanford R. Cowan is the Publisher.
- Amateur license terms are extended from 3 to 5 years.
- November 15 – ARRL creates a new DXCC program, forcing all amateurs to start over with their countries worked totals.
- Oscar Hammarlund (founder of the Hammarlund Manufacturing Co.) passes away.
- Johnsonville Sausage is founded by Ralph and Alice Stayer and named after their home town.
- Japan starts using Kamikaze pilots.
- Hitler commits suicide.
- Operation “Paperclip” is formulated. This is an effort to recruit German engineers and scientists involved with the German rocket program from World War II.
- The atomic bomb is dropped on Japan (twice in two different locations), effectively ending the Pacific war.
- The United Nations begins operation.
- Akio Morita founds the Sony Corporation in Japan.
- The Federal Government drops control over the sale of radio tubes.
- The new FM broadcast system is relocated to 88 through 108 MHz (up from 42-50 MHz).

## 1946

- Erwin Kreis W9HRM passed away. In 1947 MRAC will apply for a club license with his call.
- The city of Milwaukee celebrates its 100<sup>th</sup> anniversary with the Milwaukee Centurama. MRAC operated a special event station handling messages for the public using the call W9USA from a building constructed for the event on Milwaukee's lakefront.
- The ARRL holds the first Simulated Emergency Test (SET).
- Most pre-war amateur bands are opened up for use. The previous 5 meter band moves to 6 meters and the 2.5 meter band moves to 2 meters. 160 meters remains reserved for LORAN use.
- Lt. Colonel John D. DeWitt Jr, N4CBC points an Army radar antenna array (3000W at 112 MHz) at the moon and receives the reflected signal marking the first time a radio signal was bounced off the moon.
- Arthur Koch W9WHM/2 and George Floyd W6OJK/2 complete the first QSO on the new 2.4 GHz band.
- The Army Amateur Radio System (AARS) resumes operation after being suspended at the start of World War II.
- June 17 – Mobile telephone service (calls from automobiles) begins in St. Louis, Missouri.
- The Tektronix test equipment company was founded in Portland, Oregon by C. Howard Vollum and Melvin J. "Jack" Murdock who create the first time-base triggered oscilloscope.
- The first calculation by computer occurs. The ENIAC computer had over 18,000 vacuum tubes.
- The first bank drive up window is used.
- The bikini swimsuit is unveiled in Paris.
- Paul W. Klipsch founds Klipsch and Associates in Hope Arkansas to build high fidelity loudspeakers.
- The Kasuga Radio Co. Ltd. Is formed in Komagane City, Nagano Prefecture, Japan. This is the company which would become Trio Electronics and then Kenwood (and then Kenwood-JVC).

## 1947

- MRAC applies for its first club call. W9HRM, from deceased member Erwin Kreis. Aldrich Kroner, W9UIT, will be the first club license Trustee.
- ARRL VHF Column Editor, Ed Tilton W1HDK appears at MRAC meeting (March). A dinner for him is held at the Elk's Club.
- At the International Radio Conference held in Atlantic City NJ the upper 300 Kc of the 10M band was removed from ham use (the band now being 28-29.7 Kc) being turned over to fixed and mobile service (public service). In addition parts of 80, 40, and 20 meters are removed from amateur use. In return the 15 meter band is opened to amateurs. Also granted was access, on a shared basis (with industrial, scientific, and medical devices) to the 11 meter band, 26.96 Mc – 27.23 Mc.
- Transequatorial Propagation was first observed on 50 MHz when W7ACS/KH6 worked VK5RL.
- CQ magazine revives the Worked All Zones (WAZ) award from their purchase of Radio magazine.
- Norwegian explorer and writer Thor Heyerdahl and a crew of 5 cross the Pacific Ocean in a 45 foot raft constructed of balsa wood and bamboo named the Kon-Tiki. The purpose was to prove South American people could have reached Polynesia in pre-Columbus times. The trip took 101 days. Amateur radio was used to maintain communications using the callsign LI2B on 40, 20, 10 and 6 meters using 10W input.
- ARRL starts the “new” DXCC Honor Roll for those with the most countries worked under the new, restarted program.
- ARRL splits its Central Division creating the Great Lakes Division made up of Ohio, Michigan and Kentucky (leaving Wisconsin, Illinois, and Indiana in the Central).
- The International Telecommunication Union (ITU) becomes a United Nations Agency.
- Clarence C. Moore W9LZX founds the International Radio and Electronics Corp. (IREC). The company changes its name in 1975 to Crown International Inc. The first products of the company were open-reel tape recorders, eventually shifting to audio power amplifiers (and under the ownership of Harman International). Mr. Moore would eventually also found the Cubex antenna company which produces quad antennas for the amateur radio market.
- WTMJ-TV goes on the air as the first commercial television station in Milwaukee.
- The first electronic kit (an oscilloscope) was sold by the Heathkit Company.
- Galvin Manufacturing Co. changes its name to Motorola.
- Edwin Land (Polaroid Company founder) demonstrated the first “Instant Camera” at a meeting of the Optical Society of America held in New York City.
- The first tubeless tires are introduced.
- Jackie Robinson begins playing baseball in the major leagues, for the Brooklyn Dodgers, being the first non-white player in the major leagues.
- Chuck Yeager breaks the sound barrier.
- The germanium based point contact transistor is invented by John Bardeen, Walter Brattain, and William Shockley at Bell Labs.

## 1948

- MRAC sponsors the ARRL National Convention at the Milwaukee Auditorium (September 4-6) resulting in an \$8000 profit (equivalent to \$64,829.88 in 2005 dollars or \$73,525.84 in 2007 dollars or \$77,648 in 2014 dollars)! The convention includes welcoming speeches by then Milwaukee Mayor Frank Zeidler and Wisconsin Governor Oscar Rennebohm. This was the first post World War II National Convention held anywhere.
- MRAC gets its first demonstration of SSB from W2KUJ of General Electric R&D (at the ARRL national convention).
- MRAC meets every Thursday at 8 PM in the Conference Room of the Milwaukee Public Museum (except the months of June, July and August).
- Commander Fred Catel, W9DTK, a club member, arranges a tour of the USS Tautog submarine docked at the Broadway bridge downtown.
- The Army Amateur Radio System joins with the Air Force to become the Military Affiliate Radio System (MARS).
- The FCC establishes the "Citizens Radio Service" in the 465 MHz frequency range with two categories, "Class A" and "Class B". Class B used radios with simpler technical standards.
- The teaching and discussion of religion is abolished in public school classrooms.
- The first solar heating system is installed.
- The first 33 RPM records are released.
- The Berlin Airlift starts.
- John Fluke founds the company which bears his name – The John Fluke Manufacturing Co. producing electronic measuring test equipment. The name would change to the Fluke Corp. in 1953.
- Varian Associates is founded in California. One of its first products was a device to measure the gyro-magnetic ratio of certain atoms. The effect would later become known as nuclear magnetic resonance.
- Frank P. Zeidler (brother of Carl, Mayor from 1940-1942), becomes the third and last Socialist mayor of the city of Milwaukee (term 1948-1960).

## 1949

- MRAC's Jack Doyle W9GPI begins a two year term as ARRL Central Division Director (he will repeat as director in future years). He is the third MRAC member to become division director.
- ARRL announces the "National Traffic System" (NTS).
- Florida becomes the first state to issue Amateur Radio automobile license plates.
- September 19 – The city of West Allis installs its first parking meters along Greenfield Ave from 69<sup>th</sup> to 78<sup>th</sup> Street.
- December 9 - The city of Milwaukee installed its first parking meters on east Wells street, downtown.
- U.S. born "Tokyo Rose" gets 10 year prison sentence for treason.
- Wisconsin inventor Harry Chamberlin begins development of the keyboard instrument, Chamberlin, an instrument using a piano keyboard to play precoded tapes of instrument sounds. As a result of a salesman illegally showing the instrument to a British company the Chamberlin concept was copied and became the Mellotron which became a very important instrument in late 60's and 70's music (especially "progressive" rock). The Chamberlin was eventually recognized as a superior sounding instrument.
- Frank McIntosh founds McIntosh Laboratories to produce high quality audio amplifiers in Silver Spring, Maryland.

## 1950

- MRAC starts an official membership drive to get all hams in the county to become members of the club,
- MRAC purchases a new International 1-1/2 ton "Metro" panel truck, trailer, and associated radio and electronic equipment at a cost of around \$4000 (\$38,500 in 2013 money). The purpose of the truck is for club activities as well as emergency operations in conjunction with local civil defense authorities. There were 2 complete operating positions with equipment by Collins, National and Harvey-Wells radios. There was also a Motorola receiver crystaled for Milwaukee Police frequencies. The truck towed a matching trailer with a 2.5 KW generator. The truck was distinctively marked with the clubs call, W9HRM (at the time).
- MRAC resumes code practice on the air, this time on 10M (29.1 Mc). Sessions are Tuesdays, Wednesdays (handled by Jim Ott W9LCD) and Fridays (done by Joe Thompson W9LJT – a resident patient of the V. A. hospital).
- MRAC sponsors a VHF/UHF contest on February 12 from 10 – 11 PM. The contest is open to all hams, but only MRAC members are eligible for awards.
- Harry Paston W9DJV, editor of the MRAC newsletter "*Hamateur Chatter*" resigns his position due to a move to Connecticut to become Assistant Secretary of ARRL.
- MRAC is invited to participate in the Milwaukee Civil Defense and Disaster Committee (CDDC). The committee director is the Milwaukee Fire Chief at the time, Edward E. Wischer.
- Milwaukee Police Department offers to provide storage facilities for any emergency and field operations equipment MRAC owns or newly purchases.
- MRAC Mobile Wing provides communications for the Milwaukee Soap Box Derby.
- MRAC (the Mobile Division of the club) provides communications for the "Good Neighbor Community Fund Drive" parade on Sunday Oct. 1. 20 Mobiles with 35 club members worked the event. This was the first time a parade had used the services of radio amateurs to help coordinate the parade operations as well as provide first aid communications (2 ambulances were called). MRAC was congratulated for its work by Mayor Frank Zeidler over the air using the mobile radio of W9FTY. There was also a Milwaukee Sentinel story of the ham activities with the headline "*City Hams Blanket Parade Win Praise from Zeidler.*"
- MRAC officially forms a local Amateur Radio Emergency Corps (AREC, the forerunner of the current Amateur Radio Emergency Service – ARES). The first MRAC meeting of each month (the first Thursday) will be devoted to AREC operations and discussions. The AREC operations will be headed by a committee consisting of 2 AREC members and 2 MRAC directors.
- MRAC exchanges correspondence with Lee de Forest regarding triode tube applications.
- The third annual ARRL VHF Sweepstakes had 400 entries which included 7 MRAC members
- The 16<sup>th</sup> annual ARRL CW Sweepstakes had 925 entries. The Central Division was won by the Wisconsin Section Communication Manager, Reno Goetsch W9RQM (seventh overall). Second place was the MRAC secretary Art Vahovius W9VSO (eleventh overall) and Third was MRAC member Russ Greenwood W9LVR (16<sup>th</sup> overall). Five other members also entered logs.

- The Korean “war” starts. China sends 850,000 troops to help North Korea resist our “Police Action”.
- Wernher von Braun and his team of German rocket scientists are relocated from Fort Bliss, Texas and other military facilities to the Redstone Arsenal near Huntsville, Alabama (and the soon created Marshall Space Flight Center).

## 1951

- The guest speaker at the April 19 MRAC meeting was Ed Handy W1BDI, ARRL Communications Manager.
- MRAC adds the office of Second Vice-President. At the time the 1st V.P. was Travis Baird W9VQD and the 2nd V.P. was Ken Eggert W9MOT.
- The club's Articles of Incorporation are changed to institute a change to the method of electing officers (going to a direct election with a nominating committee, instead of the membership just electing a board of directors and the board selecting who is what officer).
- MRAC provides communications to the motorcade (beginning at the Wisconsin Illinois border) and eventual parade in Milwaukee for General Douglas MacArthur (after MacArthur being removed from his command of United Nations troops in Korea). See article on the event later in this book.
- MRAC meets every Thursday evening (except for summer months) at the Milwaukee Public Library in the second floor conference room 8:00 PM.
- MRAC installs Civil Defense amateur radio stations in area police departments and some fire departments. This was similar to the War Emergency Radio Service installations during World War II.
- September – MRAC Communications van is officially dedicated at the club picnic at Kletzsch Park. Festivities were attended by Captain Michael F. Phillips, Director of Milwaukee Civil Defense and Disaster Committee and Karl Werwath President of Milwaukee School of Engineering.
- The MRAC communications van appears at the Milwaukee Auto Show. Club member Jack Doyle W9GPI was a member of the Auto Show management committee making the appearance possible.
- Wisconsin gets Amateur Radio call sign automobile license plates.
- FCC creates the Novice, Technician and Extra class licenses to join the Advanced (formerly class A), General (formally Class B) and Conditional (formerly class C) licenses. Licenses terms were now 5 years except Novice which was 1 year, non-renewable. Novices were limited to 75 watts input with crystal frequency control of CW on portions of the HF bands. Novices also had CW and Phone privileges in the 145-147 MHz segment of 2 meters. All Novice call signs were 2x3 with the second letter being an "N". The Novice test was a 20 question written and 5 wpm CW test originally administered by FCC examiners. Also, a person could only hold a Novice license one time. The Technician license as created had all amateur privileges from 220 MHz and up (No 6 or 2 meters). The intent was to get a bunch of people experimenting on the then new (their first use was during WWII) "UHF" frequencies.
- Over 3 million Koreans are dead in one year due to the "war".
- National Engineers Week is created. The date is selected to coincide with George Washington's birthday President Washington was an engineer who was the first to call for an engineering school in the United States.
- The 22nd amendment is added to the Constitution - No person can be a U.S. President for more than two terms.
- The Tri-Cities (Moline Illinois; Rock Island Illinois and Davenport Iowa) Blackhawks NBA team moves to Milwaukee to play as the Milwaukee Hawks. After 4 last place seasons in Milwaukee, the team owners move the team to St. Louis, Missouri.

## 1952

- MRAC has 250 members.
- MRAC provided communications for an auto race at Elkhart Lake. Twenty-five members stationed in their cars strategically parked around the 7-1/2 mile race course funneled their observations of the race's progress to the net control.
- MRAC ladies auxiliary is started.
- The cover of the May 1952 Issue (Special Mobile Issue) of CQ magazine features the MRAC communications van. A one column story appears on page 80 (as written by Charlie Kaetel W9SNK).
- March 22 – The first South-Western Ohio Hamvention was held at the Biltmore Hotel in downtown Dayton Ohio. 600 people were in attendance with 7 exhibitors and 6 forums. The next year the name of the convention would be changed to the Dayton Hamvention.
- Bird Electronic Corp. introduces the model 43 directional wattmeter.
- The 6146 vacuum tube is introduced.
- US Amateurs are allowed access to the 15 meter band.
- Radio Amateur Civil Emergency Service (RACES) is formed as a possible radio service to be used in times of war.
- December—FCC stopped issuing new Advanced class licenses and took away unique Advanced and Extra privileges, everyone General and up had the same privileges (after changing license classes and rules 1 year earlier).
- The first UHF TV station goes on the air.
- Denver TV station is the first to go on the air with more than 5KW of power.
- Vice President Richard Nixon goes on live TV to address allegations of improper fundraising in a speech which became known as the “Checkers” speech due to references to the family dog named Checkers.

## 1953

- MRAC starts an achievement award program for making contacts and participating in contests.
- The first W9DXCC meeting was held in Chicago (December 1).
- 1x3 “K” prefix calls begin to be assigned where 1x3 “W” call signs ran out.
- January—the first amateur radio signals reflected from the moon were heard.
- Milwaukee based Koss Corporation is founded as a television rental company.
- Sidney Harman and Bernard Kardon found the audio equipment company Harman Kardon after having worked at the Bogen Company, a leading manufacturer of public address systems (and also some consumer audio equipment over the years).
- Novices were given the use of a small portion of the then new 40M band (CW only).

## 1954

- The West Allis Radio Club is formed (again).
- Novice license testing was turned over to volunteer hams who would administer the code test, send paperwork to the FCC who would then return a written test which the volunteer would administer and then send to the FCC for final grading.
- Inoue Corp (now Icom) is founded by Tokuzo Inoue in Osaka, Japan.
- Edwin Howard Armstrong, the real inventor of FM and related FM broadcasting committed suicide by jumping from his 13<sup>th</sup> floor New York apartment window after suffering the emotional and financial effects of his legal battles with RCA over FM patents (the suits were eventually settled in Armstrong's favor, well after his death).
- The first silicon transistor is produced by Texas Instruments.
- The Regency Company introduces the first transistorized consumer AM portable radio.
- The Nash-Kelvinator Corporation purchases the Hudson Motor Car Co. with the result becoming the American Motors Corporation (which would have extensive operations in Wisconsin).
- Jim Wilson of the Milwaukee Braves pitches a no hitter against the Philadelphia Phillies at Milwaukee County Stadium winning 2-0.

## 1955

- MRAC establishes TVI technical staff to help all Milwaukee amateurs that are having TVI problems.
- MRAC Old Timers Nite (December 29) was held at Pabst Blue Ribbon Hall with 103 in attendance.
- A membership drive during the year results in 40 new members.
- MRAC has 260 members (paid and Life).
- MRAC meetings are changed to the 1<sup>st</sup> and 3<sup>rd</sup> Thursdays of each month (except June, July and August).
- MRAC meeting average attendance for the year is 62.
- The Waukesha Amateur Radio Club is formed.
- Actor Willem Dafoe is born in Appleton, Wi.
- W.C. "Claude" and N.B. "Bert" Blain form Blain's Farm and Fleet stores in Janesville, Wi. During the same time, Blain family friends Stewart Mills Sr. and his sons Henry and Stewart Jr. form Fleet Wholesale Supply in Marshfield, Wi. The two families worked out a plan to have similar names and operate in different areas of the state. Fleet Wholesale Supply then became Mills Fleet Farm.
- Technician class licensees receive 6 meter privileges.

## 1956

- MRAC meets every Thursday evening at 8 PM at the Lutheran Center 1113 W. State St. except during the months of June, July, and August.
- For one hour prior to every MRAC meeting Al Belanger W9MDG taught code practice.
- MRAC sells its communications van to the City of Milwaukee Civil Defense Organization due to increasing insurance and maintenance costs as well as lack of easy accessibility (being stored in the City of Milwaukee garage which allowed access only during weekday normal business hours). The price the city paid was \$3500 including the installed radios.
- After another membership drive, MRAC has 260 members (as of January).
- May 21 – WITI-TV goes on the air as an independent TV station in Milwaukee.
- U.S. starts the Interstate Highway System.
- The TAT-1 telephone cable was laid from Scotland to Newfoundland. This was the first undersea telephone cable spanning the Atlantic Ocean. The “cable” was really 2 cables, one for each direction of calls. It was capable of 48 simultaneous conversations.
- The Nobel Prize in Physics is awarded to the 3 inventors of the transistor - John Bardeen, Walter Brattain, and William Shockley.
- One of the inventors of the transistor, William Shockley starts a company, Shockley Semiconductor, in Mountain View California to pursue his visions of the future of silicon devices.

## 1957

- MRAC’s very own Jack Doyle W9GPI begins another term as ARRL Central Division Director (having previously served from 1949-1951). He will serve 2 more terms between now and 1963.
- MRAC meets every Thursday evening at 8 PM at the Milwaukee Central Library 814 W. Wisconsin Ave. except during the months of June, July, and August.
- Terry Sterman W9DIA launches Amateur Electronic Supply. Terry would become an MRAC member in 1958.
- Collins radio introduces the KWM-1, the first amateur transceiver. It was also the first commercial SSB transmitting device. It covered 10, 15, and 20 meters.
- Russia launches the first satellite, named Sputnik (October 4).
- The R. L. Drake Co. introduces the model 1A receiver. It possibly is the first receiver designed specifically to receive single sideband, then a new voice mode.
- Chicago again hosts an ARRL National Convention.
- The Milwaukee Braves baseball team wins the World Series, beating the New York Yankees 4 games to 3.
- The Green Bay Packers open the new City Stadium built expressly for professional football games, the first such stadium in the country. Its original capacity was 32,500.
- Fairchild Semiconductor is formed from 8 engineers who left Shockley Semiconductor. Among the 8 engineers are Gordon Moore and Robert Noyce who would later form Intel Corporation. The engineers are sometimes referred to as “The Gang of 8” or the “Traitorous 8”. The company was formed with financing from Sherman Fairchild and the company became a division of Fairchild Camera and Instrument Co.

## 1958

- MRAC meets the first 3 Wednesdays of the month at the ESM Building 3112 Highland Ave. except during the months of June, July, and August.
- MRAC members participate with and supervise a drawing for a Hallicrafters receiver at Amateur Electronic Supply's Christmas Party.
- Bob Paquette forms Select Sound Service in Milwaukee to provide commercial and live sound audio systems.
- 27 MHz is taken away from hams and the Class D Citizens Radio Service created.
- Every amateur station was required to have a receiver capable of receiving possible emergency broadcasts of the CONELRAD (**C**ontrol of **E**lectromagnetic [or **E**lectronic] **R**adiation) broadcast system (on either 640 Kc or 1240 Kc) and to monitor it any time their station was transmitting (so they could immediately shut down in case of an enemy attack).
- Cosmos Industries introduces the Cosmophone 35 SSB transceiver. Over the next couple of years a total of only 100 of 3 different Cosmophone models (35, 50 and 1000), were ever produced including the model 1000, a kilowatt version of the transceiver.
- The Jet Propulsion Labs Amateur Radio Club is formed.
- Gerald Holtom, a British graphic designer and artist designed the logo for the British Campaign for Nuclear Disarmament which would go on to be recognized as an international peace symbol (becoming popular starting in the late 1960's).
- Leo Esaki, a Japanese scientist, observes that a semiconductor diode heavily doped with impurities will exhibit a negative resistance under certain circumstances. This is the discovery of the Tunnel Diode.
- Harmon / Kardon introduces the first Hi Fi stereo receiver (Tuner, preamp, and power amplifier in one package).
- Milwaukee's John Koss and Martin Lange Jr. demonstrate a phonograph with a privacy switch and the world's first stereo headphones, the model SP/3. The original SP/3 headphone is in the Smithsonian.
- The Milwaukee Braves baseball team again won the National League pennant but this time lost the World Series to the New York Yankees 3 games to 4.

## 1959

- MRAC Sponsored the Wisconsin QSO Party. First place winners in 5 divisions receive engraved gold cups made possible by commercial sponsors.
- Clarence Crapo W9VD received a plaque for 40 years of membership and service to the club.
- MRAC will begin sponsoring a Contest Cup Award to be first awarded in 1960 for members active in on-air contesting.
- Amateur Electronic Supply starts demo's of new equipment at MRAC meetings courtesy of Terry Sterman W9DIA (AES owner and MRAC member).
- MRAC members go on a field trip to the Hallicrafters plant in Chicago.
- MRAC meets the first 3 Thursdays of each month at the Lutheran Center 1113 W. State St. except during the months of June, July and August.
- MRAC member Carl Rohde W9ROM is selected as the winner of a regional completion for a slogan for the Hallicrafters Corp new VHF SSB equipment. He won a \$100 gift certificate.
- The 9<sup>th</sup> Midwest YL Convention is held in Milwaukee (May 22-23 at the Polly Valley Motel, 12700 W. Blue Mound Rd). The group has members in Michigan, Indiana, Illinois, Minnesota, Ohio and Wisconsin. MRAC's own Mary Meyer W9IUJ is convention chairwoman.
- Collins Radio introduces the KWM-2 80-10 Meter SSB/CW transceiver.
- Technician class licensees are given a portion of the 2 meter band (145-147MHz).
- ARRL petitions the FCC to expand the 20 meter band from 14.300 MHz to 14.350 MHz.
- Alaska becomes the 49th state.
- Hawaii becomes the 50th state.
- Fidel Castro takes over Cuba as dictator.
- America's first 7 astronauts are selected.
- The Pioneer 4 satellite is launched to fly by the moon. It is the first US spacecraft to escape the earth's gravity.
- There are 159,000 licensed amateurs in the U.S.

## 1960

- MRAC still runs Civil Defense Emergency drills (latest in May 1960).
- MRAC meets the first 3 Thursdays of each month at the Milwaukee Public Museum, except during the months of June, July and August.
- MRAC together with the West Allis Radio Club hold 2 10 meter "phone" contests (Feb 10 and Nov 16) which run for 1 hour. There were approximately 50 participants. There are also a CW only contest on Wed evening April 6.
- MRAC sponsors the Wisconsin State QSO Party on the second Sunday in December. 38 logs were submitted with a few more stations participating.
- MRAC holds a picnic at Kletsch Park on Sunday July 17.
- With spearheading by MRAC, The Wisconsin Council of Radio Clubs is re-activated with its first new meeting held Feb 25 in Fond du Lac and presided over by MRAC's Jack Doyle W9GPI.
- July—the first amateur radio moonbounce 2 way contact takes place.
- U.S. Hams received an additional 50 KC at the top end of the 20 meter band.
- October - The first issue of "73" magazine is published. It was 68 pages long. A subscription was \$3 per year, \$5 for 2 years and \$7 for 3 years with DX subscriptions going for \$1 per year more. The cover price was 37 cents (73 backwards).
- The U.S. signs a treaty with Japan to defend them against future attacks. U.S. builds its first military bases in Japan.
- U. S. President Kennedy makes a speech which commits the U.S. to putting a man on the moon before the end of the decade (*"We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard; because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one we intend to win."*).
- U2 spy plane is shot down over Russia.
- U.S. launches first reconnaissance satellite.
- FDA approves the first oral contraceptive (birth control) pills, \$10 for one month supply.
- The U.S. atomic submarine "Triton" circumnavigates the globe in 84 days, 30,708 miles.
- The U.S. begins a limited embargo of items against Cuba.
- The first demonstration of a laser by Theodore Maiman at Hughes Research Labs takes place. Its laser used a ruby crystal to produce a red light.
- Lucille Ball divorces Dezi Arnaz after they finished filming their TV series.
- Lew Burdette of the Milwaukee Braves pitches a no hitter against the Philadelphia Phillies again at Milwaukee County Stadium (August 18), beating the Phillies 1-0, missing a perfect game by only a hit batter (who was erased on the bases by a double play) soon followed by Warren Spahn who threw another no hitter on September 16 also against the Phillies winning 4-0.
- The Kasuga Radio Co. Ltd. Of Japan changes its name to Trio Electronics. It would later change its name to Kenwood Corp.

## 1961

- MRAC meets the first and third Thursday evenings at 8 PM at the Milwaukee Central Library 814 W. Wisconsin Ave. except during the months of June, July, and August.
- MRAC sponsors a CW only 10 meter contest on Thursday evening Feb 16. There were 20 participants.
- Milwaukee Amateur Radio Emergency Corps meets monthly at the Police Station at 47<sup>th</sup> and Vilet under the direction of Bob Goldstein K9KJT, Milwaukee County Emergency Coordinator (and MRAC member).
- December 12 - OSCAR 1, the first amateur radio satellite and the first non-government sponsored satellite is launched.
- Heathkit introduces the DX-60 AM / CW crystal controlled 75 / 90 watt transmitter. There will be a DX-60 and an "A" and "B" version over the years. The transmitter will be very popular with Novices and new Generals. There will be a matching VFO (HG-10) and receiver (HR-10).
- The Mosley Company, maker of antennas, introduces its one and only ever electronic product, a receiver, the CM-1. Few were sold and after one year the receiver was discontinued.
- Kenwood USA is created as a distribution company for Trio Electronics products sold in the US. The company was formed by William "Bill" Kasuga, George Aratani and Yoichi Nakase.
- President Kennedy creates the "Peace Corps".
- Russia puts the first man into space.
- Congress passes a bill making it a Federal crime to hijack an airplane or ship.
- The Berlin wall is built dividing the city into West and East (Communist run).
- The 1st U.S. military companies arrive in South Vietnam.
- Warren Spahn throws his second no hitter on April 28 at County Stadium beating the San Fransisco Giants 1-0.
- The Green Bay Packers win the NFL championship.

## 1962

- January 5 - Emil Felber W9RH takes over as trustee of the club license (W9HRM) from Tom Gettleman W9IZO.
- MRAC Meetings are at 8 PM on the first and third Thursdays (except June, July and August) at the Central Library in downtown Milwaukee.
- For a social event, the club held a combination bowling party / dance. Bowling was from 7-9 pm with the dance beginning at 9, featuring live music. A buffet dinner was served at 11:30 pm and then dancing resumed going until 2 am (and needing to pay the band extra to go until 2)!
- In October, MRAC meetings move to the Milwaukee School of Engineering (MSOE) in the Allen Bradley Hall of Science, still the first and third Thursdays except for June, July and August.
- MRAC has 170 members including 36 Life and 6 Honorary (no dues from those).
- MRAC meeting attendance for the year averaged 35, with a high of 55 and a low of 22.
- It was discussed to possibly make the club roster a directory of all hams in the Milwaukee "area", not just club members. It was decided not to attempt unless sufficient advertising could be obtained to cover the increased costs as well as actually getting enough information on those additional people.
- June—OSCAR 2, the second amateur radio satellite is launched. It transmits on 2 meters (there is no receive).
- Navy-Marine Corps MARS (Military Affiliate Radio System) is formed.
- The CONELRAD system for national emergency broadcast (see 1958) is discontinued in favor of the Emergency Broadcast System.
- John Glenn orbits the earth in a space capsule named Friendship 7. The event was televised and watched by 135 million Americans.
- The first privately owned satellite "Telstar" relays TV programs.
- The first K-Mart opened. The store was an evolution of S. S. Kreske stores. That first K-Mart was in Garden City, Michigan.
- U.S. blockades Russian ships delivering missiles from reaching Cuba. The U.S. threatens to invade Cuba not knowing that the Russians already had 12 small nuclear missiles in Cuba. The Russians fortunately back down.
- The Green Bay Packers again win the NFL Championship.

## 1963

- To help raise money for the ARRL building fund, MRAC holds a “Jack Doyle Testimonial Dinner”.
- MRAC has 191 members.
- MRAC member and past and future officer Carl Rohde W9ROM puts a combined base station and repeater on the frequencies of 146.34 MHz input and 146.94 MHz output into operation. This is one of the first repeater systems in the upper Midwest. Eventually the system becomes the 146.82 repeater.
- ARRL proposes the (in)famous Incentive Licensing program to the FCC.
- The first Russian woman orbits the earth.
- The IRE (Institute of Radio Engineers) merged with the American Institute of Electrical Engineers to form the IEEE (Institute of Electrical and Electronic Engineers).
- Race riots are becoming common in the U.S.
- 115 countries sign a World Treaty banning nuclear test in the atmosphere, except France and China.
- The international telecommunications conference designates “SOS” and “Mayday” be accepted for distress situations in space (having been designated for use in maritime situations previously).
- Dr. Martin Luther King Jr. starts his civil rights marches in Washington.
- November - President John F. Kennedy is assassinated during a motorcade in Dallas, Texas.

## 1964

- MRAC proposes a merger with the Milwaukee Amateur Radio Emergency Corps (AREC). AREC was formed by MRAC some years earlier. It appears no action was ever taken.
- U.S. Post Office releases Ham Radio stamp on the 50th anniversary of the ARRL.
- The Bose Corporation is formed in Framingham Mass. by Dr. Amar G. Bose to produce speakers and related audio electronics.
- The Beatles make their first live US television appearance on the Ed Sullivan Show as well as release the movie “*A Hard Day’s Night*”.
- China explodes their first atomic bomb.
- Marquette Electronics was formed by Warren Cozzens and Michael Cudahy (a former ham while living in Ireland as a boy) to be a company designing and manufacturing... (they were not sure yet). By the end of 1965 they would be in the early stages of creating a world leader in medical electronic instrumentation (full disclosure, the editor worked for the company from 1981 to 1993). Also see the Central Division Convention of 1967.

## 1965

- MRAC contributes \$192 to the ARRL building fund.
- As part of an open house at AC Spark Plug (the forerunner of Delco Electronics) in Oak Creek, MRAC members Harold Engelke K9CMX and Bernie Towers K9ZPP staff an amateur radio display (using ARRL and MRAC materials).
- During the weekends of July 3 and July 24 the radio telescope (1000 foot diameter dish) at Arecibo, Puerto Rico is put on 432 MHz EME (moon bounce) by KP4BPZ (500W on SSB and CW).
- August - The first meeting of what would become the Central States VHF Society was held in Sioux Falls, South Dakota.
- GE ceases the publication of the GE Ham News – a newsletter which covered various technical topics of interest to radio amateurs.
- OSCAR III is launched. It is the first 2 way amateur satellite with both uplink and downlink on the 2 meter band.
- Palm Sunday – an outbreak of 48 tornados cuts a path across Wisconsin, Iowa, Illinois, Indiana, Michigan and Ohio. By the end of the storms, 260 people are killed and up to 3400 people are injured.
- After a study and report from the National Weather Service following the Palm Sunday tornado outbreak, the terms “Tornado Watch” and “Tornado Warning” are introduced.
- Merle Kachenmeister WA8EWW a National Weather Service employee in Toledo, Ohio organizes the “Tri-State Weather Network” (based on the southern “Skywatch” program) to increase the number of trained severe weather spotters. The program evolves into the nationwide “Skywarn” program.
- National Radio Company introduces the all solid state HRO-500 receiver.
- The Chicago FM Club (CFMC) is formed (Feb. 25).
- The National Radio Institute (NRI) began offering correspondence classes in getting an amateur radio license. As part of the course a student could purchase and build HF receiver and transmitter kits. The kits carried the brand name of “Conar” which was the electronic kit division of NRI. Soon after, the kits were available to non-students also. The receiver and transmitter together came in well under \$100 at the time.
- Marquette Electronics (a company formed by Michael Cudahy, a former ham, and Warren Cozzins who were manufacturers representatives for Fluke among other companies), begins offering a means to electronically archive Electrocardiogram data based on a request by Northwestern University Hospital in Chicago. No company offered such a product. This takes Marquette into the medical electronics arena where they would become a \$500 million company by the early 1990's)
- Panasonic introduces the Technics brand to sell audio equipment.
- U.S. bombs North Vietnam as the first troops land in DaNang.
- The first cigarette packages to have health warnings on them are produced.
- National attention is brought to ban the use of the drug LSD (which was up to this time, legal).
- Ralph Nader, a young lawyer, fights for safety regulations on all cars.
- The Treasury Dept. reports the Vietnam War is costing America \$1,200,000,000.00 per month.

- A folk singer named Bob Dylan performs an electric guitar based 3 song set at the Newport Folk Festival shocking festival goers and changing the course of music to come.
- The trade magazine "*Electronics*" publishes an article by Gordon Moore (at the time, head of R&D at Fairchild Semiconductor) entitled "*Cramming More Components onto Integrated Circuits*" where Moore described a doubling every year in the number of components contained in an integrated circuit. This has been expanded to sort of apply to all technological advancements, like computer processing power doubling every year and other variations (none which Moore specifically said).
- Milwaukee Electric Tool relocates its operations to Brookfield.
- The Milwaukee Braves baseball team moves to Atlanta, Georgia for the start of the 1966 season.
- The Green Bay Packers win the NFL Championship.

## 1966

- MRAC Meetings continue at the Milwaukee School of Engineering but move to the Broadway Building on the first Thursday of each month except for July and August.
- MRAC/AREC receives a donation from WISN-AM of their 5000 watt backup AM transmitter. The transmitter will eventually be sold to another broadcast station (KUMU in Honolulu, Hawaii) with the proceeds going to establish Milwaukee County AREC Inc. (the board which handles the capital equipment for ARES).
- Amateur Radio Emergency Corps Inc. (basically a board of directors for AREC) is formed as a tax exempt corporation to receive donations and own equipment. The entire first board consists of MRAC members.
- The South Milwaukee Radio Club is formed by Vern Teske W9RYA, an MRAC member. Vern learned the plan of two auctions per year (spring and fall) from MRAC at the time. He would remain South Milwaukee club President until his death in March 2010!
- OSCAR IV is launched. It is the first amateur satellite to utilize different uplink and downlink frequency bands. 2 meters up and 70 cm down.
- The R. L. Drake Co. introduces the R4A receiver.
- The Hallicrafters Co. is sold to Northrop Corp.
- Bob Heil founds Heil Sound in Fairview Heights, Illinois to sell pro audio equipment and repair Hammond Organs.
- The television series "*Star Trek*" premieres on the NBC television network.

## 1967

- MRAC sponsors its second Central Division ARRL Convention. The West Allis and Menomonee Falls clubs join to help at the convention. Advance sale tickets are \$5.50 and include convention entry and banquet. The club made a profit of \$170 (their share of the total profit).
- MRAC Meetings move to the second Thursday of each month except for July and August (still in the B Building of the Milwaukee School Of Engineering).
- MRAC has 160 members.
- MRAC dues is \$7 per year and includes ARRL membership!
- The Wisconsin Nets Association sponsors the Wisconsin State QSO Party.
- Dave Theophilus W9KWG and Sherm Carr W9NGT (who was Section Emergency Coordinator) begin working with the National Weather Service on a system of storm spotting and weather info transfer using hams (modeled after the new Skywarn program).
- Allied Radio stops selling ham equipment in its stores. The stores had a dedicated space called "The Ham Shack".
- The Pontiac Motor Co (division of General Motors) had a program to provide QSL cards to any licensed radio amateur. Up to 100 cards per year per person are available.
- "Incentive Licensing" takes effect, returning the Advanced class license and taking privileges away from Generals, effectively stopping growth of Amateur Radio and causing a lot of bad feelings among the amateur community for the ARRL who originally proposed the program (see 1963). The plan was implemented in 3 "phases" taking a total of 3 years to appear.
- Chicago TV Station WFLD installs a working ham station in its news studio and broadcasts live public service communications during the blizzard of 1967.
- The movie "*The Graduate*" starring Dustin Hoffman and Ann Bancroft is released.
- Jack Ruby, the man who shot Lee Harvey Oswald while television cameras were rolling, died in a hospital where he was taken after becoming ill in prison awaiting a decision on a new trial for the killing of Oswald.
- There are race riots in 159 cities across the country, including Milwaukee. In many cities, the National Guard is called out and in Milwaukee Marshall Law is enacted and a curfew is instituted. The Milwaukee situation lasted from July 31 to August 3.
- The first human to human heart transplant is performed by Dr. Christian Barnard in South Africa.
- December 31 – The Green Bay Packers defeated the Dallas Cowboys to claim the National Football League championship en route to another Super Bowl. The game came to be known as the "Ice Bowl" due to the game time temperature of -15 degrees with a wind chill of -48 degrees. That made it the coldest temperature for any NFL game ever played.
- The Green Bay Packers beat the Kansas City Chiefs 35-10 to win the first Super Bowl.

## 1968

- MRAC (in conjunction with the West Allis, Ozaukee, and Menomonee Falls clubs and AREC) operates a demonstration station at the then fledgling Summerfest. The tent housing the station blew down during severe winds causing some damage, but a new tent was erected and a station was put back on the air.
- Numerous discussions occurred during the year as to how to increase club membership and meeting attendance (and...).
- MRAC conducts code practice on 10 meters every Monday, Wednesday, and Friday evening (beginning April). Walt Glish W9YYW, Bob Stuckert WA9SYD, and Ray Weeks WA9JOV conduct the sessions.
- MRAC applied to the FCC for a new club call of W9RH (from W9HRM) call formally held by Emil Felber (recently deceased).
- FCC authorizes slow-scan television as an emission mode.
- The first teaser ads appear for a new transceiver from a company called Signal/One. Signal/One was a division of Electronic Communications Inc (ECI) which was a division of NCR doing contract work for the Navy. The head of the Signal/One operations was Dick Ehrhorn WA4NGO (later W4ETO). The company was formed one year earlier in 1967.
- The R. L. Drake Co. introduces the R4B receiver.
- Robert Noyce and Gordon Moore leave Fairchild Semiconductor and found NM Electronics (their initials). Later in the year they purchase rights to the use of a word from a company named Intelco. The word became their new company name – Intel.
- McGraw-Hill purchases the National Radio Institute renaming it NRI Schools, part of the McGraw-Hill Continuing Education Center.
- Dr. Martin Luther King Jr. is assassinated.
- President Johnson orders a complete halt to the bombing of North Vietnam.
- The first adult human to human heart transplant is performed in the United States by Dr. Norman Shumway at Stanford University Hospital.
- The first heart transplant in Wisconsin, and the 58<sup>th</sup> in the country, was performed October 21 on 49 year old Betty Anick at St. Luke's Hospital by Drs. Derward Lepley Jr. and W. Dudley Johnson.
- October, local radio station WZMF strays from its beginnings as a MOR (Middle of the Road) music station to become one of the first freeform / underground / progressive radio stations in the Midwest.
- The National Basketball Association awards Milwaukee an expansion basketball team – the Milwaukee Bucks.
- The Green Bay Packers beat the Oakland Raiders 33-14 to win Super Bowl II.

## 1969

- Publication of the club newsletter "Hamateur Chatter" resumes (October).
- The Milwaukee-Florida Net is founded by Mel Amidzich WA9PZU (in Milwaukee) and Charles Meyer K4HQY (former W9GVL) (retired and now living in Pensacola, Florida). Both hams were MRAC members.
- The use of radio amateurs as storm spotters and relayers of severe weather information to and from the National Weather Service in Milwaukee becomes official (after 2 years of developing the procedures).
- The Milwaukee School of Engineering creates yet another radio station using the call letters WSOE (again). At the time the station is just a carrier current AM station broadcasting mainly to the school campus area.
- The "*Badger State Smoke Signals*" newsletter is begun as a newsletter for the Baraboo Yellow Thunder Amateur Radio Club. It grows to represent clubs across the state of Wisconsin.
- Radio Amateur Satellite Corp. (AMSAT) is formed (incorporated in Maryland) to aid radio amateurs in space communications.
- The Inoue (now Icom) FDFM 2M FM transceiver is the first official offering of amateur equipment in the US by a Japanese company (under their own name, previous efforts were OEM radios rebranded by US manufacturers).
- Jim Fisk W1DTY and Skip Tenney W1NLB form a company to produce a new technically oriented ham magazine entitled "*Ham Radio*". February is the first issue published, one month after the company is formed.
- The Signal/One CX-7 Transceiver is finally introduced at a price of \$2195.
- Another group of executives from Fairchild Semiconductor leave to start another company. This time it is Advanced Micro Devices.
- July 20 approximately 9:56 PM (CST) - Astronaut Neil Armstrong is first human to set foot on the moon as part of the Apollo 11 mission. 20 minutes later he was joined by fellow crew member Buzz Aldrin.
- 3 weeks before Woodstock (see below) on July 25-27, Wisconsin State Fair Park (actually a flat bed trailer in front of the racetrack grandstand) hosted the Midwest Rock Festival. Attendance was 45,000 to see many bands who would not be at Woodstock as well as many local bands. Tickets were \$15.00 for all 3 days.
- The Woodstock Music and Art Fair takes place August 15-18 (actually at White Lake, not Woodstock, NY). 32 folk and rock music acts perform outdoors before an estimated 400,000 people, the largest such gathering up to that time.

## 1970

- Many club members participated in an open house program where they invited members of the club to come see their Ham Shacks.
- Per a letter from ARRL of February 28, 1970, MRAC is identified as the longest affiliated club of the ARRL still operating.
- SEWFARS (Southeastern Wisconsin FM Amateur Repeater Society Inc.) – the 146.82 repeater is formed (the repeater had been operational for some time).
- Dick Ehrhorn W4ETO leaves Signal/One and starts Ehrhorn Technological Operations to produce high power RF amplifiers (the Alpha brand).
- The National Radio Company, after declaring bankruptcy, introduces the last of the line of the “HRO” receivers, the HRO-600. It is sold mainly to government and commercial customers (at a price of \$5600). Possibly fewer than 200 were ever manufactured.
- Technics (a brand of Panasonic) introduces the world’s first direct drive phono turntable.
- May 4 – During an anti-war protest at Kent State (Ohio) University, National Guard troops fired into the crowd (a total of 67 shots), killing 4 students, injuring 9 (including 1 who suffered permanent paralysis). Two of the four killed were not in the protest but were students walking from one class to the next. In response to the incident, colleges and high schools around the country closed the next day due to a strike by over 4 million students.
- The first “Earth Day” was observed April 22, 1970, having been proposed by then US Senator Gaylord Nelson, Senator from Wisconsin (and former Wisconsin Governor).
- In an anti-Vietnam war protest, Sterling Hall at UW Madison is targeted by blowing up a van filled with explosives parked outside. Located in the building were the Physics and Astronomy departments along with the Army Math Research Center. No one was supposed to be in the building at the time, but there were five people inside. Robert Fassnacht, a physics researcher and the father of three young children, was killed and four others were injured. Until the Oklahoma City Federal Building bombing in 1995, this was considered the largest act of domestic terrorism and the first use of explosives contained in a truck (van). In all 30 buildings were damaged but the Army Math lab (the supposed target) had minor damage. Four people were accused of the bombing and as of September 2014 all but one had been captured and charged and had served prison time.
- Six days before the start of the 1970 baseball season, a local group led by Allan H. (“Bud”) Selig purchased the bankrupt Seattle Pilots baseball team and moved them to Milwaukee to become the Milwaukee Brewers (now a major league team instead the previous minor league Brewers).

## 1971

- The Kantronics Company is formed. Their first products include CW decoders. They will be at the forefront of packet communications in the 1990's.
- National Radio Co. files for Chapter 11 bankruptcy and ceases to manufacture radio equipment. Their HRO receivers were ham favorites.
- Bob Ferrero K6AHV (later W6RJ) opens up Ham Radio Outlet in California.
- 18 year olds get the right to vote.
- President Nixon has audio recording equipment installed in the White House to record conversations taking place.
- The Mariner 9 spacecraft is launched from Cape Canaveral on a mission to orbit Mars. It became the first spacecraft to orbit another planet (planet, not moon) beating the Soviet Union by 1 month.
- Intel produces its first microprocessor, the 4004.
- The Milwaukee Bucks, taking advantage of the talents of Oscar Robertson and Lew Alcindor (shortly to become Kareem Abdul-Jabbar) win the NBA championship in only their third season.
- There are about 285,000 licensed radio amateurs in the U.S.

## 1972

- The West Allis Amateur Radio Club proposed a winter hamfest. Area clubs including MRAC are invited to participate in the planning and operation of the hamfest with profits and costs to be divided accordingly. MRAC eventually declined to participate (*we made a lot of wrong moves in the early 70's – ed.*). So did any other group invited.
- Novice hams were allowed the use of VFOs instead of only crystal control for frequency. Their 2M operating privileges were removed.
- Technician licenses are granted access to the complete 2 meter band (up from just 145-147 MHz).
- FCC creates specific repeater rules leading to specific repeater callsigns (with a “WR” prefix). This was the result of a number of amateurs around the country asking for more details in the rules regarding repeater construction and use (“be careful what you wish for...”).
- The first 6M moonbounce (EME) contact was completed between Joe Muscanere W5HMK and Richard Allen W5SXD in Houston Texas and Connie Marshall K5WVX and Sam Whitley W5WAX in Muskogee, Oklahoma (July 30).
- The first meteor scatter contact on 432 MHz was completed by John Fox W0LER and Carl Scheideler W2AZL.
- The Northern California DX Foundation (NCDXF) is formed by Vince Chin K6KQN, Lee Shaklee W6BH, Jack Troster W6ISQ and Don Schliesser K6RV. Their aim was to provide support to major DX Peditions including support for QSL cards and necessary equipment.
- MFJ Enterprises is formed by Martin F. Jue in Starkville, Ms. Its first product was an audio CW filter kit that sold for \$9.95.
- Roland Stordahl (now AE5E), a college student working on his PhD in electrical engineering, assembled a kit of parts to build an electronic keyer and began selling the kit via mail order. The name of the company formed to sell the kit was Digi-Key, and was based in Thief River Falls, Minnesota. The company would go on to become one of the largest distributors of electronic components in the world.
- Allied Radio exits the mail order business.
- Hewlett Packard introduces the HP-35 pocket calculator. It is the first “scientific” calculator, containing trig functions and other mathematical functions beyond the basic addition, subtraction, multiplication and division functions. It also used a method of entering data called “reverse Polish notation” (yes, that is a real term, not slang).
- Atari Inc. is incorporated and the company introduces the arcade video game “Pong”.
- President Richard Nixon makes the first China visit by a modern day president.
- While campaigning for President, Alabama Governor George Wallace is shot and paralyzed from the waist down.

## 1973

- MRAC member George Ruger W9DVD (and former city of Milwaukee Alderman), organizes the CQ3TUE (CQ Third Tuesday) lunch gathering for area hams (January). There were 27 hams in attendance at the first lunch. The lunch continues to this day (2019).
- The West Allis Radio Amateur Club begins a hamfest which continues to this day. First year attendance was over 400. The date was February 3.
- The West Allis Radio Amateur Club sponsors a 10 Meter contest February 14-15.
- R. L. Drake Co. introduces the R4C Receiver. The “C” has a completely different architecture compared to the previous models in the R4 series. It would be the last in the series, remaining in production until 1980.
- At the Rochester (New York) hamfest, the banquet speaker was A. Prose Walker, W4BW, Chief of Citizens and Amateur division of the FCC. During his one hour speech (which was supposed to be only 20 minutes) he chastised the amateur radio community for no longer justifying itself to exist. Walker stated appliance operators were in the majority and amateurs were no longer making significant contributions technically and in the FCC’s eyes there was a question about the value of amateur radio. This tone continued throughout his entire speech.
- April 3 – Martin Cooper, a Motorola engineer, made the first mobile telephone call from a handheld phone (there already existed mobile telephone service) to Dr. Joel Engel of Bell Labs. This was done in front a number of news reporters.
- Xerox Corporation develops essentially what would be the world’s first “personal computer”, the *Alto*, complete with a graphical user interface and using something called a “mouse” for navigating the interface. Multiple computers could even be easily networked. The machine was developed at the **Palo Alto Research Center (PARC)**, which was Xerox’s R&D operation. However Xerox’s upper management did not understand the invention. They decided to turn over all things related to the Alto project over to Apple Computer in return for 1 million shares of Apple stock. Soon Apple incorporated all the technology into their products and Xerox... (well).
- Rockwell International purchases Collins Radio Co.
- The Vietnam War ends with US troops leaving and the North overtaking South Vietnam.
- The Watergate break-in cover-up/scandal comes to light.
- Gerald Ford is appointed to the position of Vice President of the US. He was the first VP appointment under the 25<sup>th</sup> amendment. He replaced Spiro Agnew who resigned.
- May 14 – The first orbiting space station – Skylab is launched by a modified Saturn V rocket. The station was damaged during launch and deployment necessitating the first in-space repairs ever attempted to any space craft.
- March 1 - The British rock band Pink Floyd release their album “*Dark Side of the Moon*”. It would set a record by remaining on the top selling album charts for over 17 years (over 900 continuous weeks). The album has estimated world wide sales of 45 million copies.

## 1974

- Chet Sakura W9CTI who was the MRAC newsletter editor moves out of Wisconsin leaving a new editor to be found.
- FCC begins issuing “WR” prefix callsigns for repeaters as part of new, repeater regulations.
- The DenTron Radio Company is formed by Dennis Had K8KXK. Their first product is a 160 M transverter. They would become a manufacturer of RF power amplifiers and antenna tuners.
- ETO ships the first 74 series no-tune Alpha amplifiers.
- April 3-4 the second largest outbreak of tornadoes (during a single 24 hour period) happened cutting across the Midwest (it was the largest until 2011). There were 148 confirmed tornados across 13 states and 1 Canadian province with 30 being either F4 or F5 in intensity. The outbreak caused \$843M in damages (in 1974 dollars - \$4.6B in 2019 dollars).
- Arab oil embargo happens. Long lines and waits for gas as big oil corporations’ limited supply to raise prices. OPEC (Organization of Petroleum Exporting Countries) limited supplies and forced the price of oil to increase greatly as the value of the dollar was diminishing. The government starts printing gas-rationing coupons in case the gas shortages get out of hand. The US even tried year round daylight savings time to save fuel.
- President Richard Nixon is ordered to release 64 audio tapes in the Watergate investigation.
- President Nixon reveals cover-up of Watergate office of the Democratic National Committee break-in and later resigns from office (August 9, 1974).
- Gerald Ford becomes the 5<sup>th</sup> person who was never elected to become President. He was the first person to become President to have never won any national election (having been appointed to the Vice President position the previous year).
- President Ford pardons Richard Nixon of all crimes.
- The U.S. movie rating system starts.

## 1975

- The Novice and Technician licenses get major changes. Among the changes are an increase in power for Novices from 75 to 250 watts. Technicians are also given full Novice privileges on the HF bands.
- A repeater autopatch is used in Chicago to call 911 for the first time.
- Tokyo High Power Labs is founded in Japan by Nobuki Wakabayashi, JA1DJW to design and manufacture HF antenna tuners and power amplifiers for the amateur and industrial markets.
- The January issue of Popular Electronics features a cover story on building the Altair 8800 microcomputer kit. This is the first real “personal computer” and the start of the “Computer Revolution”.
- Northrop Corp. sells the Hallicrafters name but keeps the factories, bringing non-military product manufacture to an end.
- Sony releases the Betamax video cassette tape recorder to the Japanese home market.
- Unemployment in the U.S. reaches 6.5 million.
- Milwaukee - Friday, October 2, after a bomb scare caused a 3 hour delay after the show had already started, Bruce Springsteen and the E Street Band returned to the stage at the Uptown Theater (after spending time at the Pfister Hotel bar) to perform an additional 3 hour set that stretched past 2 AM.

## 1976

- MRAC offers code and theory classes at Wauwatosa East High School, to boost membership. Classes are taught by Dick Oberholzer W9ZPV, Walt Glish W9YYW and Dave DeFebo WB9BWP. The classes would run at least one session per year for 9 to 12 weeks. Some years there will be two or three 9 to 12 week sessions. This would begin a run of 20 years offering classes on a continuous basis.
- MRAC has 138 members.
- MRAC publishes no newsletter on its own, instead supporting a southeastern Wisconsin radio club newsletter (9 clubs in total) called The Hamateur (with our permission) published by Larry McCalvy WA9JMO.
- At the December 9 Old Timer's Nite, Dick Scarvacì K9CAN was made a life member. Besides being only 35 years old making him the youngest life member, Dick is also the first time a son of a life member (John W9GIL) became a life member.
- ARRL Central Division Convention held in Milwaukee, July 9 and 10, sponsored by the West Allis Radio Amateur Club. MRAC sponsors a hospitality suite on Friday evening, July 9.
- "WN" prefixes for Novice licenses were eliminated.
- Hams no longer need to change their callsigns when moving to another call area. Now hearing a particular call on the air may not give an idea as to where the station is actually located.
- Heathkit stops production of the DX-60 AM / CW "Novice" transmitter.
- The VHS (Video Home System) video cassette tape recorder is sold by the Victor Corporation of Japan (JVC) in Japan. JVC would eventually merge with the Kenwood Corporation.
- Bob Reitman, radio DJ at local station WQFM, broadcasts from a trailer at State Fair Park continuously for 222 hours and 22 minutes setting a record and being listed in the Guinness Book of World Records for 1978 and 1979. Guinness has since removed the category of continuous broadcasting to not encourage possible dangerous activity.

## 1977

- MRAC begins having meetings at Wauwatosa Savings and Loan (having moved from the Milwaukee School of Engineering) thanks to the efforts of Al Belanger W9MDG.
- Radio station WOKY has a call in show (10 pm – 1 am) dealing with amateur radio (August 14).
- FCC suspends all Amateur Radio license fees.
- John Fluke Mfg. Co. releases the model 8020A handheld digital multimeter. It becomes the first successful handheld digital meter (and at a reasonable cost too).
- The first fiber-optic telephone circuits are put into service.
- August 3 - Radio Shack introduces the TRS-80 microcomputer.
- Commodore Business Machines, after passing on buying the rights to the Apple II computer from Steve Jobs and Steve Wozniak, introduces the Commodore PET microcomputer.
- Apple Computer is incorporated by founders Steve Jobs, Steve Wozniak (a former ham), and Mike Makkula Jr.

## 1978

- MRAC membership is 195 (including 80 Life members).
- MRAC charged \$5.00 for license classes and gave free membership for the balance of the year.
- The MRAC Board had discussions on the club setting up a repeater. The discussion ended with the subject being officially tabled (what did we say about bad decisions in the 70's?).
- MRAC license classes add a General class to the Novice class. The new class is taught by Al Bellanger W9MDG. The classes had 100 total enrollees, 25 for the General class and 75 for the Novice.
- The March meeting of MRAC had an attendance of 74 members and visitors.
- MRAC along with Milwaukee ARES stage an amateur radio show at Mayfair Mall covering an entire weekend (March 4 and 5). Flanner & Hafsoos audio store provides overnight (Saturday night) storage for our equipment, thanks to Gordon Weiler W9ZQK.
- Bird Electronics (the wattmeter people) sent a representative (at their cost) to present a program for the club at the April meeting. Meeting attendance was 51 members and 32 visitors – 83 total!
- MRAC holds a spring luncheon, this year with an emphasis on the club's 60<sup>th</sup> anniversary.
- MRAC Field Day operations move to Nike site in Lannon owned by radio station WQFM. Arrangements by Jack Krause W9JK.
- The September MRAC meeting consisted of a discussion and demonstration of fast scan amateur television. It included receiving pictures from one of the participant's home TV station.
- The October meeting of the club was a tour of the TV channel 6 studios and transmitter (and included being able to watch the 10 PM newscast "live").
- The Trimble Navigation Company Ltd. is formed by 3 people from HP, in an office above the old Los Altos theatre in Silicon Valley. Its focus is the creation of navigational products based first on LORAN and then moving to the brand new Global Positioning System (GPS). This would be the genesis of the GPS and related industry.
- The first of what will become a system of GPS satellites, named NavStar, is launched.
- The Novice license becomes a renewable license (following the example of all other license classes).
- The FCC stopped (February 23) the Extra-class only vanity call sign program due to internal mishandling and some corruption.
- The ability of a person to hold multiple station licenses (having multiple callsigns), known as a secondary callsign, at different addresses is eliminated by the FCC.
- As of March 24, the FCC will be assigning call signs automatically, in sequential order. This is the start of the "Group" call sign assignments.

- The FCC bans the manufacture of RF amplifiers capable of operating between 24 and 35 MHz in order to try to stem the use of illegal high power on the 27 MHz CB band. The ban applies to ALL manufactured amplifiers. This required manufacturers of ham amplifiers to come out with new models that had 10 meters removed from their bandswitches. Most amplifiers could be modified to cover 10 meters by licensed amateurs often with factory supplied parts upon proof of license (and at extra cost of course).

## 1979

- MRAC has 198 members.
- Besides its monthly meeting, MRAC offers a tour of Midwestern Relay Company in Rubicon (west of Hartford) – Thursday evening, June 7.
- MRAC along with Milwaukee ARES once again stage an amateur radio show at Mayfair Mall covering an entire weekend (September 8 and 9). As before, Flanner & Hafsoos provides Saturday overnight storage for our equipment, thanks to Gordon Weiler W9ZQK. The show, coming at the start of a series of license classes, results in a large number of people signing up for classes.
- MRAC adds a dinner to the annual Old Timers' Nite / Christmas Party to celebrate 60 years of affiliation with ARRL. ARRL Vice-President/General Manager (and future IARU President) Dick Baldwin W1RU, attends along with Central Division Director Don Miller and Vice Director Ken Ebnetter. 125 members and visitors attend.
- MRAC changes rules for life membership from 20 years continuous membership to 20 years continuous membership and 60 years of age. Also life members are urged to pay at least ½ of the current dues to continue to receive newsletters by mail.
- West Allis Amateur Radio Club again sponsors a Central Division Convention at (what was the) Red Carpet Inn – June 15 and 16. MRAC Sponsors a hospitality suite the evening of June 15 (Friday).
- The Milwaukee Journal publishes a 6 page article (including the cover illustration) in its Sunday supplement section "*Insight*" on amateur radio. MRAC is prominently mentioned as well as some members and photos of some members.
- Hams are granted privileges on 10 MHz, 18 MHz, and 24 MHz at the World Administrative Radio Conference (WARC) held in Geneva Switzerland. It would take some years before FCC rules were changed to allow use of these frequencies.
- The Vibroplex Company was bought by Peter Garsoe and moved from New York City to Portland Maine.
- Two hams buy CQ magazine from Cowan Publishing.
- Icom America is established to handle US product sales, distribution, and repair.
- July 11 – The abandoned space station Skylab re-entered the earth's atmosphere and began to break apart southeast of Perth, Western Australia.
- March 23, local radio station WZMF, one of the first "underground / progressive" radio stations in the Midwest signs off, after a few hours of on air partying / goodbyes ("*What are they going to do, take our license away?*").
- Three Mile Island (near Middletown, Pennsylvania) nuclear accident occurs. It is the worst commercial nuclear accident in the US. The core of reactor Unit 2 reached 5000 degrees before it was brought under control.

## 1980

- MRAC Meetings change to the first Thursday of each month (except July and August). The change was the result of Wauwatosa Savings date assignments.
- MRAC adds a license class covering both Advanced and Extra to the Novice and General classes the club has been running. Al Bellanger W9MDG is the first instructor of the new class, moving over from the General class.
- MRAC suffers through a brief political turmoil with the removal of a director from the board – Russ Burss W9RKP, (for the first time in club history?), the resignation of a President, alternative, semi-secret meetings, and general turmoil (including letters from lawyers from both sides of the issue). One club meeting consisted of nothing but members shouting at each other for almost 3 hours. It was at least 6 months until things began to return to a “normal” state. Some members, including several life members, never returned to the club, leaving in protest. This also marked the beginning of a period of contention between some members as to what the club should be doing and how to do it.
- MRAC “Old Timers Nite” (not yet called a Christmas party) on December 11, featured ARRL Vice President/General Manager (and future IARU President) Dick Baldwin W1RU (once again) as well as Acting Central Division Director, Ken Ebner K9EN, Director Elect, Edmond A. Metzger W9PRN, Wisconsin Section Communications Manager Roy Pederson K9FHI, and former division Director Phil Haller W9HPG. The party continued the recent addition of a dinner for a cost of \$8.50 per person.
- Governor Lee Dreyfus signed documents proclaiming May 17th Amateur Radio Day in Wisconsin. This notice was displayed on a sign on City Hall. QST magazine runs a picture of Milwaukee City Hall with Amateur Radio sign in the December issue. A picture also appears on the cover of a Norwegian ham magazine as May 17<sup>th</sup> is a national holiday there – Norwegian Constitution Day.
- May – The Milwaukee Area Amateur Radio Society (MAARS – 145.13 repeater) is formed.
- FCC allows the use of ASCII code for teletype and other digital transmissions (previously restricted to 5 level Baudot code).
- The Dentron Company is sold. Soon to disappear.
- The magazine “*Nuts & Volts*” is founded. It starts life as a large format, printed on newsprint, all advertising “magazine”. It would be some years before the advertising would be cut back and it take on the look of a “real” magazine with technical articles.
- Ted Turner of Atlanta, Ga, starts the first all-news / 24 hour news television channel in the United States – Cable News Network - CNN. The sign on was 5:00 PM June 1.
- December – John Lennon of the Beatles is murdered by a crazed “fan” outside his home in New York City.

## 1981

- MRAC meetings return to the second Thursday of every month at Wauwatosa Savings and Loan on 75<sup>th</sup> and State St.
- MRAC has a booth at the International Science & Engineering Fair (5/11-5/16) at MECCA (Milwaukee Exposition and Convention center).
- The Milwaukee City Hall photo of Amateur Radio Day (May 17) appears in a Norwegian Radio Relay League magazine.
- The club is polled by the ARRL about a new code free license proposal.
- Thanks to a gift by a school alumnus, radio station WMSE, a public FM broadcast station, owned by the Milwaukee School of Engineering begins operation (March 17) on a frequency of 91.7 MHz at a power of 1000 W (replacing the WSOE AM station started in 1969).
- The first space shuttle, named Columbia, goes into space.
- John Coleman, a meteorologist and TV weatherperson, who did a stint in Milwaukee at WISN TV channel 12, founded the Weather Channel along with Frank Batten a media company owner. The Weather Channel would be the first 24 hour weather news and forecasting TV channel. Coleman was forced out of his job as CEO and President of the Weather Channel one year later.
- The Milwaukee Brewers baseball team won the second half of the season American League championship. The season was split in two due to a players strike. The Brewers lost a best of five playoff with the NY Yankees (in 5 games) for league championship.
- There are about 433,000 licensed radio amateurs in the U.S.

## 1982

- The FCC votes to retain the Morse code requirements for all grades of license.
- Dick Baldwin W1RU retires as ARRL VP/General Manager and becomes IARU President (a position he will hold for 17 years).
- President Regan signs into law a bill that allows the FCC to authorize licensed hams to create and administer amateur radio license tests.
- The Milwaukee Brewers become American League Baseball champions but lose the World Series to the St. Louis Cardinals in 7 games.

## 1983

- MRAC acts as QSL manager for Space Shuttle flight STS-9.
- MRAC demonstrates a 10 foot earth station satellite (TV) antenna to all Milwaukee area hams at a meeting.
- MRAC creates the Herb Wareing Memorial Book Fund to buy books for area libraries. The fund was created from a donation by the widow of Herb Wareing W9NY. The fund was set up to only spend any interest the principle monies generated resulting in few books actually ever being donated. The fund was created by a vote at a club auction, after previously being decided to not conduct any club business at the auction. In the late 1990's the fund will be abolished.
- MRAC charges 25 cents for a for sale listing in the newsletter. Few ever appeared.
- MRAC May auction/elections meeting has attendance of 84 including 15 visitors!
- Television station WISN (ch 12) tapes a feature at MRAC Field Day for the 5 and 10 pm Saturday news.
- MRAC again provides communications for an across the state bike event lasting an entire week, sponsored by the Milwaukee Sentinel called SAAGBRAU – “Sentinel Active Americans Great Bike Ride Across Wisconsin”, including staffing the net control point in the lobby of the Journal/Sentinel Building.
- FCC creates the Volunteer Examiner program (September 22). Anchorage Amateur Radio Club (Alaska) becomes the first Volunteer Examiner Coordinator.
- MRAC begins to administer amateur tests locally (as a Volunteer Examiner – VE) working under DeVry Institute of Technology, a VEC in Chicago.
- FCC maintains code requirements, there are many requests to reconsider.
- W5LFL becomes the first amateur radio operator to operate from space aboard the Space Shuttle during flight STS-9.
- ETO (Alpha amplifiers) begins supplying RF amplifiers to GE Medical for MRI machines.
- IBM scientists J. Georg Bednorz and K. Alex Müller achieved superconductivity in an oxide material at a temperature of  $-238^{\circ}\text{C}$  (as opposed to the temperature of absolute zero of  $-273.15^{\circ}\text{C}$ ).
- In November, Chrysler Corporation introduces the first “Minivan” (even though GM commissioned a study in the 1970s which suggested they introduce a vehicle like a minivan, but they decided it would cut into station wagon sales so they decided not to do the minivan). There were other European and Japanese models introduced earlier, but none had the name of “minivan”.

## 1984

- MRAC goes into full operation as an independent Volunteer Examiner Coordinator (VEC). Charlie Kaetel W9SNK applied for and received VEC approval from the FCC without prior club discussion or approval (as Charlie often would do things). Jack Krause, W9JK is the first MRAC VEC manager (taking over from our VE group which was working under DeVry VEC). See the complete story elsewhere in this document.
- H. Charles Kaetel W9SNK becomes the first Honorary Member of MRAC in at least 40 years (he had been a Life Member).
- FCC creates PRB-1 rule issuing a limited federal pre-emption over local tower laws.
- Amateur licenses go from a 5 year term to 10 years.

## 1985

- Japan reports more than 1 Million licensed radio amateurs in that country.
- The Movie “*Back to the Future*” is released.
- The MIT Media Lab is founded. Its purpose is to invent the future on an annual budget of \$75M.
- Herb Kohl pays 18 million dollars to purchase the Milwaukee Bucks basketball team.

## 1986

- MRAC is QSL manager for Tony, W0ORE, on Space Shuttle Mission STS51-F.
- MRAC field day operation makes over 1000 contacts.
- MRAC operates a special event station at Polish Fest.
- The membership votes to have the club picnic on the same day with Field Day.
- Packet radio is introduced.
- The Space Shuttle Challenger explodes on liftoff killing all aboard.
- Motorola develops the “Six Sigma” quality process.
- The Rock and Roll Hall Of Fame Foundation begins the Rock and Roll Hall Of Fame inducting performers and others involved in rock music in yearly ceremonies (Foundation actually formed in 1983 but no inductees happened until 1986).
- Trio Electronics which has been producing amateur radio and consumer audio equipment under the Kenwood brand (in the US) changes the name of the company to Kenwood Corp.

## 1987

- MRAC provides communications for the Tri-County YMCA Races.
- MRAC sends \$200 to the Clements Michigan Leance-Cruze Amateur Radio Club to help fight a lawsuit to defeat a ban on amateur radio antennas.
- Under the direction of Harry Cieszki KD9AJ, an amateur radio demonstration was conducted for the students of Madison Elementary School in Wauwatosa.
- MRAC bylaws again revised.
- MRAC changes legal name with the state of Wisconsin from Milwaukee Radio Amateur Club Inc to Milwaukee Radio Amateurs’ Club Inc (adding the s followed by an apostrophe).
- March 21, Novice Enhancement is put in place which results in Novices gaining privileges on the 10M band. CW and data is allowed from 28.0 – 28.3 MHz and SSB voice from 28.3 - 28.5 MHz.
- Juan Nieves throws the first no hitter in Milwaukee Brewers history against the Baltimore Orioles on April 15 in Baltimore Memorial Stadium winning 7-0.
- Władziu Valentino Liberace (“Liberace”) dies in Palm Springs, Ca.
- Russian nuclear power plant disaster at Chernobyl.

## 1988

- MRAC starts a 10 meter net on 28.400 MHz (the frequency was chosen to allow Novice licenses to check in). The time of the net was Fridays at 9PM. It would later be changed to 8:45 PM (the time confused many possible check-ins) to accommodate the 2M net. The club previously had a 10 meter net in the 60's and early 70's.
- The Global Maritime and Distress Safety System was put in place by the International Maritime Organization providing satellite and digital maritime distress signaling (instead of using CW).
- 270 people were killed when a bomb was exploded on PanAm flight 103 bound from London to New York. The Boeing 747 went down over Lockerbie, Scotland killing all on board as well as 11 people on the ground. The bombing was attributed to Libyan intelligence agents. Lawsuits and government fines (due to lax security) from the incident resulted in PanAm declaring bankruptcy early in 1991 with full shutdown by the end of that year.

## 1989

- MRAC did a demonstration of amateur radio at the Wilson Park Senior Center (March 2). Participating were Roger Zaun W9UVV, George Philbert KA9MXM, Travis Baird W9VQD, Ed Seruga KE9JJ and Harry Cieszki KD9AJ.
- MRAC operates a demonstration ham station at Discovery World in the Milwaukee Public Library on Tuesday and Wednesday September 19 and 20. Kelly Schaefer N9HBN and Harry Cieszki KD9AJ oversee the operations.
- MRAC continues the occasional spring party (sometimes lunch, sometimes dinner party) on Thursday May 11 at Kuglitsch's Hall and Bowling, (44<sup>th</sup> and Greenfield). Cost was \$10.00 per person for buffet dinner and beer and soda.
- MRAC Christmas Party takes place at Tanner Paull Hall, Restaurant and Lounge in West Allis on Thursday, December 14. Cost was \$10.00 including food buffet and beer and soda.
- Ten-Ten International holds its second Biennial International Convention in Milwaukee. The featured guest speaker is Dave Sumner K1ZZ VP ARRL.
- March 13 – A powerfull geomagnetic storm blasted the earth resulting in a power blackout in Canada causing 6 million people to be without power for 9 hours. The storm disrupted power generation at the Hydro Qubec power station and is said to have even caused some power transformers to melt in New Jersey.
- Pete Rose is banned from anything (professional) baseball, for life, for betting on his own team (Cincinnati Reds).

## 1990

- MRAC meetings continue on the fourth Thursday of each month.
- MRAC starts purchasing Field Day radio equipment and antennas (including a Kenwood TS-430 from the estate of George Philbert KA9MXM).
- MRAC officers move to 2 year terms.
- MRAC has 175 members as of January.
- MRAC conducts Amateur Radio demonstration at Discovery World Museum (August).
- Ham Radio Magazine is sold to CQ Magazine and the June issue is the last for Ham Radio as an independent magazine.
- Jim Wills N5HCT (an Extra class license) petitions the FCC to implement some sort of user selectable callsign at an additional fee. The FCC denies the petition. Wills then writes his Congressman with his desires.
- Hubble Space Telescope is launched. Focus doesn't work due to a mirror problem which will be corrected by a historical spacewalk in later years.
- Gulf War to rescue Kuwait from Iraq invasion, begins.
- East and West Germany became a single country again after 45 years (beginning at the end of WW II).

## 1991

- MRAC members provide communications at the Channel 10/36 wine tasting event at Mayfair Mall.
- Jim Harrington N9FPG (a past member) donates a Heathkit SB-104 transceiver to MRAC for Field Day use. The radio was in need of some repairs. Jim Tromblay WB9LNU brought it back to life. The club now has 2 radios for Field Day and other special use.
- The club purchases a Cushcraft A3S 3 element tri-band beam for Field Day use.
- MRAC License classes move to Marquette Electronics R&D Center (thanks to Dave DeFebo WB9BWP and Michael Cudahy, Marquette CEO) after Wauwatosa recreation department (operators of Wauwatosa East High School after normal school hours) raised rent paid by the club for using Wauwatosa East High School (to a rate of \$7/hr. per room/night which would have been up to \$126/room for a 9 week session. We sometimes used up to 4 rooms for multiple classes).
- TV station WISN (Channel 12) has a daily, afternoon, 1 hour talk and call-in show on a variety of topics. One show spent the entire hour discussing amateur radio (with an emphasis on the Gulf War) with local hams as guests.
- FCC creates a new Technician license without a Morse code requirement. This was based on a proposal by QCWA.
- April – Steve Nagel N5NAW commanded the first all-ham Space Shuttle crew aboard *Atlantis* with Kenneth Cameron, KB5AWP; Jay Apt, N5QWL; Linda Godwin, N5RAX, and Jerry Ross, N5SCW, during the SAREX (Shuttle Amateur Radio EXperiment) program.
- 220 MHz – 222MHz was reallocated from amateur radio use to the Land-Mobile radio service based on a proposal from UPS for an amplitude companded speech mode. The UPS proposal was filed after the comment date passed creating much controversy. UPS never utilized the spectrum or the special voice mode.
- Trevor Bayless of Twickenham, England invents the wind-up (crank) radio (the Bayless Freegen was the first model) where a crank mechanism runs a small generator to power a shortwave radio. The invention was instrumental in bringing radio and the prospect of information to people in underdeveloped countries where large numbers of the population do not have electricity.
- Jeffrey Dahmer was discovered to have killed, dismembered and eaten parts of a number of young men (at least 12) in his north side Milwaukee apartment.
- There are about 494,000 licensed amateurs in the U.S.

## 1992

- October—MRAC finally gets a repeater of its own. The frequency is 147.045. It is temporarily (temporary being about 8 years) located at Ed Wille's house (read the complete repeater story elsewhere in this book).
- MRAC sells personalized coffee mugs in an effort to raise money for the recent repeater purchase (to repay Ed Wille). The mugs were available for a donation of at least \$20. There were a number of donations of more than \$20 including some at \$50 and at least two at \$100.
- MRAC holds its last Field Day at the old Nike Missile site in Lannon (due to site sale to a private party). Thanks to the permission of the new owner of the property for the last year. The owner had already demolished the 2 concrete block buildings at the site making the site a large empty field (except for some construction debris).
- MRAC VEC holds tests at a church (sorry I don't know the name) on 117<sup>th</sup> and Cleveland on the third Tuesday of each month from 6:30 PM – 9:30 PM.
- Rear Admiral Grace Hopper passes away at the age of 85. She retired from the Navy at the age of 79 after 41 years of service. She then became a consultant to Digital Equipment Corp (a job she held until her death). Besides being the only woman to achieve the rank of Admiral, she is credited with coining the term "debugging" (after removing a moth from an early computer), developing the first compiled computer language, COBOL, and for using the phrase, *"It's easier to ask forgiveness than it is to get permission"*.
- Heathkit exits the amateur radio market.
- The ITU undergoes a restructuring. Among other things, future conferences formally called "World Administrative Radio Conference" (WARC) will be called "World Radio Conferences" and more frequently than the 10-20 years as in the past.
- William Halligan W9AC founder of Hallicrafters Co., one of the early manufacturers of amateur radio (as well as shortwave and commercial radio equipment) passes away at the age of 93.
- Bud Selig, owner of the Milwaukee Brewers baseball team is named acting Commissioner of Baseball.

## 1993

- MRAC classes for all grades of amateur license and VE testing move to Village At Manor Park thanks to Phil Lehman, KB9FOQ (a resident of Manor Park).
- MRAC Field Day takes place at Indian Mounds Boy Scout Camp thanks to Wayne Schrubbe N9RXB.
- Harold H. Beverage W2BML, developer of the "Beverage" antenna passes away at the age of 99 (see 1921).
- Hytera is founded in Shenzhen, China to produce communications equipment.
- President Bill Clinton signs a law allowing the FCC to charge amateurs for the privilege of selecting a custom callsign and having that fee directly applied to the FCC budget (the actual law covered the collection of annual regulatory fees). This established the legal means to create the vanity callsign program.
- Sears discontinued the publication of its very large and expensive catalog (which over the years had carried ham equipment).

## 1994

- MRAC dues raised to \$15 in large part due to newsletter publishing costs.
- MRAC Field Day moves to the Railroad Museum (original Cedarburg railroad depot building) at Pioneer Village in Ozaukee County, thanks to Fred Linn, W9NZF.
- MRAC provides communications for Mount Mary College and a fund raising art sale. Six members participated and the school was thankful and impressed with our services.
- MRAC offers an award to the person(s) who contacts club members on the club repeater (other than during the club net). Byron Bye N9RTL is the only certificate winner having contacted 22 members within a one month period.
- MRAC conducts an amateur radio demonstration station at Discovery World.
- MRAC operates a 75<sup>th</sup> anniversary of ARRL affiliation special event station at Pioneer Village (our new Field Day site). 23 members come out to participate and make 75 phone and CW contacts. The event also doubles as a surprise 70<sup>th</sup> birthday party for Ed Wille W9PWG the club President at the time.
- Various MRAC events receive publicity through "*Bargain Express*" area newspapers thanks to the work of Byron Bye N9RTL.
- Amateur Electronic Supply has its first "Superfest" with MRAC having a club table and conducting license exams.
- Dave Knaus WA9POV (later N9QA), former MRAC member and board member, who was responsible for helping the West Allis club get their January hamfest created (among many other activities Dave was involved in) receives a heart transplant after a 4 year wait. Dave passed in 2009.
- "Bluetooth", the short range (less than 10 meters) data transfer protocol operating in the 2.4 GHz band is developed by Jaap Haartsen an engineer with Sweeden's Ericsson. It was developed to be a wireless substitute for traditional serial cables (the RS-232 standard).
- FCC grants Novice licenses full privileges on the 222 MHz band (except repeater ownership and at a 25W power level).

## 1995

- Position of MRAC board Chairman (which was a non-voting position filled by the immediate past-President) is eliminated and new By-Laws are written.
- MFJ Enterprises begins acquiring companies with the purchase of Mirage (VHF amplifiers and wattmeters).
- U.S. Coast Guard eliminates the use of CW on maritime frequencies.
- The FCC proposed guidelines for the reassignment of amateur callsigns. This would lead to the vanity callsign program.
- The non-amateur operations of ETO (Alpha amplifiers) is merged into Applied Science and Technology. The amateur operations become Alpha/Power.
- Sidney Shure, the founder of Shure Brothers Inc. of Evanston Ill. maker of microphones, turntable cartridges, and other audio electronic products passes away at the age of 93.
- Radio station WMSE at the Milwaukee School of Engineering, increases its power to 3,200 W.

## 1996

- MRAC establishes weekly Friday night net on 2 meters (using the club repeater) joining the existing 10 meter net. 10M was at 8:45 PM and 2M was at 9:15 PM confusing everyone who wanted to check in to either net.
- MRAC has last meeting at Wauwatosa Savings Bank (due to bank remodeling eliminating the meeting room). Wauwatosa Savings makes arrangements with Mayfair Mall for groups who had been using the bank to get free use of the Mayfair Community Room. MRAC declines the offer.
- MRAC continues as VEC with Ed Wille W9PWG taking over from Jack Krause W9JK who ran it for 12 years (Ed being President did not search for anyone else to run the VEC, he just took it over himself, a trend he would continue with other club jobs).
- MRAC holds the last license class of current 20 year continuous run. It is held at the Village at Manor Park and is a Technician Class. Over the 20 years, over 500 different people took at least one grade of class. At least 20 different people took turns teaching the classes.
- J. Travis Baird W9VQD passes away (1/24). Besides holding numerous club offices, running the auction for more than 30 years, and always willing to donate time and even money for the club throughout his life, an award will be created in his name to be given to members “who have demonstrated a long term commitment to promoting the amateur radio service” (from club web site). The award is established in 2002. As of 2018 the award has been presented two times.
- MRAC had 179 members as of July.
- The FCC issues the first callsign of the current vanity callsign program on May 31.
- David Packard passes away. In 1939 Packard and Bill Hewlett form the Hewlett Packard Company, which became one of the premier electronic test equipment and computer companies in the world.
- Pabst Brewing Co., now owned by out of state concerns, closes the Milwaukee brewery and office complex.
- Arthur Jones becomes the first African-American police chief of the city of Milwaukee.

## 1997

- MRAC has a new meeting location at Redemption Lutheran Church after Wauwatosa Savings eliminates their community meeting room to add more office space. Ed Wille W9PWG was a church member as well as the church being a customer of Ed’s business. MRAC ends up being the only non-church group to use the church building. The bank had made arrangements for groups who had used the bank for meetings to have access to a community room at Mayfair Mall at no charge, but Ed decided not to pursue the matter (never bringing it to the board – following the trend of Ed just handling things by himself).
- MRAC VEC stops testing at Village at Manor Park on Wednesday evenings mainly due to space issues.
- The movie “*Contact*”, about an astronomer who makes contact with an alien civilization is released. In the movie, the astronomer as a young girl is a ham.
- The Green Bay Packers beat the New England Patriots 35-21 in Super Bowl XXXI. This is the Packers first Super Bowl appearance and win since 1968.

## 1998

- Ed Wille W9PWG completes a record (at the time) 8+ continuous years as club president. Unfortunately, people get used to a long term President and don't feel the need to volunteer for club work.
- The club VEC ceases testing at Wauwatosa Saving Bank in Oak Creek (on the 2<sup>nd</sup> Saturday of each month) due to diminishing attendance (and this was a second monthly test date).
- The club Christmas party ran \$800 into the red primarily due to the practice of giving flowers to all couples / single attendees (and an unexpected number of single attendees).
- MRAC has 141 members.
- The PSK31 digital mode (the first of the "soundcard" digital modes besides teletype, packet, SSTV and CW – all which existed before personal computers) is developed by Peter Martinez G3PLX. It is introduced to the world in December.
- President Bill Clinton becomes the first President to be impeached since Andrew Johnson (marks only the third time in US history a President has been impeached).
- The first pieces of the International Space Station are assembled in space by astronauts from the space shuttle Endeavor.
- The Fluke Corp. is acquired by Danaher Corp.
- A mockup of the Elecraft K2 is shown and an initial pitch for the soon to be new company was made at Pacificon (a California hamfest) on October 20.
- Bud Selig is named the official commissioner of baseball after having been the acting commissioner since 1992.
- The Green Bay Packers lose 31-24 to the Denver Broncos in Super Bowl XXXII.

## 1999

- January – Ed Wille W9PWG, currently a director of the club, has his fourth heart attack and passes away at his desk. It took two entire board meetings and one entire club meeting to discuss all the things Ed did/had done for the club and to make plans for others to take over those functions. Ed had a habit of taking things on himself and never asking for anyone else's help. As a result, many club functions were performed by Ed alone and no one else knew anything about what it took to perform those functions. People got used to Ed handling everything and not having to get involved themselves. That was something that had to change.
- John Kraak KF9XL and Tom Fuszard KF9PU take over VEC duties after the death of Ed Wille W9PWG. It was discovered at this time that many people especially non club members had signed up as Volunteer Examiners (VEs) during Ed Wille's term as VEC manager, only to never be asked to participate in a testing session.
- The March MRAC meeting features Bart Jahnke W9JJ a Wisconsin native who works for the ARRL (among other duties, he is their VEC manager). MRAC pays air fare to bring Bart to the meeting. This was originally set up by Ed Wille who unfortunately passed away before he could see the program happen.
- MRAC adds an email address for communicating with the board.
- The MRAC phone number changes from 466-HAMS to 797-MRAC.
- The FCC proposes major changes to amateur rules, cutting license classes from six down to three with a single 5 wpm code test for the two highest classes – General and Extra (new Novice and Advanced class licenses would be eliminated).
- The Global Maritime Distress and Safety System becomes a requirement for emergency and information communications for all ships at sea worldwide.
- A reference design for a future "Cubesat" is developed by professors at California Polytechnic State University and Stanford University.
- Jean Shepard K2ORS passes away at the age of 79 in Florida. "Shep" as he is sometimes known was a writer, actor, radio host, TV personality, storyteller, etc. He is perhaps best known for co-writing, narrating, having a bit part in, and having the story based on his auto-biographical short stories, for the movie "*A Christmas Story*" about young Ralphie and his quest for a Red Rider BB gun for Christmas. In later years the movie will achieve "classic" status and will be run in 24 hour marathon sessions on cable TV channel WTBS (and also sister network, TNT) over Christmas Day.
- McGraw-Hill stopped accepting new enrollments to NRI (National Radio Institute), effectively ending NRI operations.
- The Hewlett Packard Company (HP) decides to spin off the test and measurement equipment operations into a separate, stand-alone company (Agilent). That would leave HP as solely a computer company. HP's first products were electronic test equipment in 1939.
- During construction of a new baseball stadium in Milwaukee, a very large crane, nicknamed "Big Blue", being used to lift retractable roof panels to cover the stadium, collapses due to high side winds while lifting a heavy load, killing 3 construction workers.
- The number of amateur radio licenses in the US was 677,392

## 2000

- MRAC's first written history as compiled by Jim Tromblay, WB9LNU is published.
- A budget prepared for the coming year (the first time a budget has been prepared in many years) shows the club operating at a significant loss (projected to be around \$1300). Looking closely at expenses for the past few years show the Chatter (newsletter) publishing and mailing costing more than dues income. Throw in Christmas Parties costing the club \$1600 (money the club had to pay above ticket sales) over the past 4 years, and \$1400 spent on printing, scanning and FAX equipment in the production of the Chatter in the mid 90's. All that spending in addition to gross repeater equipment costs (over \$3000 for just the Icom repeater alone which would be replaced in a few years due to poor performance) has cost the club thousands of dollars over the past 5 years that has not been replaced (or really planned for).
- MRAC again offers license classes, starting with a Technician class, now at Amateur Electronic Supply.
- MRAC creates its own World Wide Web site. Actually the club took over a site created earlier by a former member, but not updated.
- MRAC VEC processes over 300 people in the first 4 months of the year in anticipation of license changes on April 15.
- MRAC Repeater is relocated atop the Eaton Corporation building (7+ stories) at 27<sup>th</sup> and Hope Streets (1 block north of Capitol Dr). It was located at Ed Wille's house on a 50' tower since the club acquired it. It took Ed's passing for the club to finally get a reasonable location for the repeater.
- The MRAC club auction is revived after about 5 years of absence. Dave DeFebo, WB9BWP, tries to follow in the tradition of Travis Baird W9VQD as auctioneer. New auctions feature a number of member donations to the club of equipment which helps to boost the club treasury.
- The MRAC newsletter begins being published in electronic form for email delivery to members with email capabilities. This has the potential of cutting some of the newsletter production costs which have been running greater than dues income for a number of years. It also may have helped bring some members into the computer age. Over the next few years all other area clubs go to electronic publishing of newsletters.
- MRAC has 120 members as of January.
- April 27 is a special pre-release screening of a movie titled "*Frequency*" in which ham radio plays an important part. MRAC via the ARRL is offered a number of free passes from the PR organization of the movie's production company. Unfortunately, we have only a few days' notice and it is on a meeting night, so the passes are distributed to various people not attending the meeting.
- April 15—Code speed for General and Extra license reduced to 5 wpm. No new Novice, Technician Plus or Advanced class licenses will be issued. Novice and Advanced class licenses can continue to be renewed. All Technician Plus licenses became converted to Technician (on the license), but retained their HF (equivalent to Novice) privileges. In a few years when all code tests were eliminated, ALL Technician Licensees then have HF (Novice) privileges.

- November—The largest and most expensive amateur satellite (Phase 3D or AMSAT-OSCAR 40) is launched. Some problems are discovered after launch (possibly due to a fuel explosion) and the satellite never fulfills its promise.
- The first ham activity from the International Space Station takes place.
- Hy-gain antennas and rotators are purchased by MFJ Enterprises from Telex Corp.
- Actress Heddy Lamar dies (Jan 19). Besides being an actress, she held a patent (issued in 1942) for the development of a frequency hopping technique which would become spread spectrum communications. Her method was developed to prevent jamming of radio controlled torpedoes.
- FCC creates the “Multi Use Radio Service” – MURS in the VHF business band (5 channels in the 151 MHz band).
- Radio Recyclers goes out of business (at least the storefront business). The inventory is auctioned off.
- Jack Kilby receives a Nobel Prize for his work in the invention of the integrated circuit. Jack did his work at Texas Instruments. Before joining TI he was employed at Centralab in Milwaukee (in the late 1950's) and actually started his pioneering work there but was told to stop and get to work on something more important to the company. What if he was allowed to continue his work on the IC while still in Milwaukee? (-ed)
- Due to a close election and some possible voting irregularities, it took 37 days after the Presidential election to formally declare a new President of the US (George W. Bush).
- There are 682,240 licensed radio amateurs in the US.

## 2001

- Regular meeting start time is moved to 7 PM (starting in January) to be sure to be done by a reasonable time.
- Dick McNew WB9PTC moves his on-air code practice from 2M simplex to the MRAC repeater (now that the repeater has a reasonable signal).
- MRAC Newsletter, "*Hamateur Chatter*" goes to a 6 week circulation period to keep costs down (printing and postage).
- Tom Czaja KG9EE and Mark Tellier AB9CD step up to be "assistant VEC managers" backing up John Kraak KF9XL and Tom Fuszard KF9PU respectively. This marks the actual creation of a self sustaining operating committee for a club function.
- MRAC Field Day features a telescope for actual viewing of sunspots, live.
- MRAC Field Day features first ever satellite contact (by Brian White K9LCQ).
- MRAC raffles a donated 10M radio and antenna with winner selected at the Christmas Party - winner was Ted Stiller WA9RDI - raffle brought in \$170.
- MRAC finishes year operating in the black for the first time in years (as a result of some strong belt-tightening and begging for donations the last few years).
- MRAC eliminates the positions of 2<sup>nd</sup> Vice President and one Director due to continuing difficulty to get people to run for office. Plus the board was really too big.
- MRAC has 125 members as of July.
- Bill Orr W6SAI passes away at the age of 81. He authored numerous articles and books on amateur radio topics (especially antennas) and was maybe most famous for editing the "Radio Handbook" (NOT the ARRL Handbook). He also was involved in the original Project Oscar creating the first amateur satellite.
- The first "space tourist" goes into space for a stay aboard the International Space Station (after paying Russia 20 million dollars).
- Steppir Antennas (later Steppir Communications Systems) is formed to produce a new type of Yagi antenna with motorized elements (their length can change to optimize the antenna for the frequency of operation).
- September 11 - Middle Eastern terrorists hijack 4 commercial airplanes and crash two into the World Trade Center towers in New York City and one into the Pentagon in Washington D.C. The fourth plane crashes in a field in Pennsylvania (possibly brought down by passengers trying to retake control of the plane). Both World Trade Center towers collapse within hours. Only military air traffic is allowed over the U.S. for 3 days.
- The US invades Afghanistan, the center of much of the world's terrorist activity (and poppy growth) and home to the organization potentially responsible for the September 11<sup>th</sup> attacks on the US.
- William R. Hewlett passes away. Together with David Packard he formed the Hewlett Packard Company (HP) in 1939.
- Rockwell International spins out the avionics division to form Rockwell Collins based in Cedar Rapids, Iowa.
- There are 683,037 amateur radio licenses in the U.S.

## 2002

- MRAC Newsletter, "*Hamateur Chatter*" goes to a bi-monthly circulation to keep costs down (and because some people didn't really understand a 6 week schedule).
- Budget for 2002 estimates actually not losing money but coming out around \$700 ahead. This has been due to massive belt tightening, electronic publication of Chatter and decreasing the number of issues of the Chatter from 11 to 7 and then to 6 per year.
- MRAC celebrates its 85th birthday with a special event station resulting in 534 contacts being made world-wide.
- MRAC repeater receives a new Decibel Products commercial antenna (April) and new GE commercial receiver/transmitter hardware (July) and changes frequency to 145.39 MHz (swapping frequencies with the MATC repeater). The new repeater radio and antenna cost  $\frac{1}{4}$  the amount spent on the last "new" batch of repeater hardware and work magnitudes better (honestly, actually work compared to the last batch of hardware).
- MRAC conducts an Extra Class license class for the first time since the early 90's (spring).
- MRAC license classes start from a second, alternate location - Brown Deer United Methodist Church.
- MRAC Field Day features not one but two telescopes (beating last year) as well as the first ever movie showing (*Frequency*) during evening break.
- The first J. Travis Baird award is presented to Dick McNew WB9PTC in recognition of his never-ending assistance and teaching of prospective and new hams in learning amateur radio and especially Morse code.
- On-air code practice on the club repeater taken over by D.J. KC9AYO, after many years by Dick McNew WB9PTC having run the on-the-air practice.
- MRAC meeting attendance from 10/98 – 5/2002 averages 40.7.
- The Central States VHF Society holds its 36<sup>th</sup> annual convention in Milwaukee. This is the first convention held in the upper Midwest since 1989 and first held in Wisconsin.
- Paul W. Klipsch, founder of Klipsch and Associates (speaker manufacturer) and designer of the Klipschorn loudspeaker (the longest running production loudspeaker) passes away at age 98.
- Switzerland joins the United Nations.
- The annual baseball all-star game, played this year in Milwaukee and the brand new Miller Park, ends in a tie after 11 innings after both teams run out of players and the baseball commissioner, Milwaukee's own Bud Selig declares the game over in a tie.
- There are 685,308 amateur radio licenses in the U.S.

## 2003

- MRAC dues go to \$17 per year to help bring the newsletter back to a monthly circulation.
- MRAC sponsors its first VHF/UHF FM Sprint style contest. MRAC is the winner in the club category. By the way, the club had a VHF/UHF contest on a Sunday in February starting in 1950.
- MRAC published club history (2000) receives its first official update.
- MRAC Repeater moves to another new location now sharing space with receivers for other local repeaters and a Navy MARS repeater on the channel 18/10/36 TV tower (receive antenna at 730 feet, transmit antenna at 630 feet). MRAC provides an antenna and cavities for the community repeater project. Thanks to MATC/Channel 10/36 for the space, Skywave Tower Service for antenna work and Dave Karr, KA9FUR, WAR Frequency Coordinator and Dave Schank, KA9WXN, Engineer Channel 10/36 for their technical work getting things running. The repeater now has coverage from Sheboygan south to the Illinois border and west through Walworth, Waukesha, Washington County (with some holes in the center of Waukesha). Quite a change from Ed Wille's 50 foot tower. See complete story elsewhere in this book.
- MRAC Field Day features the showing of another movie (*Contact*).
- Tom Fuszard, KF9PU, one of the MRAC-VEC managers, is elected to the position of Chairman – National Council of VECs (NCVEC) at their annual meeting in Gettysburg, Pa. (7/03)
- MRAC offers for sale (donation) the first CD-ROMs of a club photo album / scrapbook in an effort to raise money for the club. Only 12 copies were sold.
- Due to some disagreements on the board, Mark Tellier AB9CD resigned as VP. He was replaced by Kevin Reemes KC9BZU. Soon after, MRAC President Patrick Moretti W9UQ resigns which prompts a shuffling of officers with Kevin Reemes KC9BZU (who was VP) taking over the job of President. Shortly after that occurred, Kevin's day job had him traveling worldwide resulting in him missing most regular and board meetings until his term expires. For over 1 year the club operated without a real club President or club leader, having board and regular meetings presided over by a revolving door of various remaining club officers. Regular meetings suffer the same fate. During all this, the first signs of personality conflict in the club in over 20 years appear including more officer resignations and remaining officers again shuffling duties.
- MRAC has 114 members (as of May).
- September – The final issue of "73" magazine is published.
- The space shuttle Columbia breaks apart during re-entry over the southern US killing all aboard including 3 hams. This is the first time there has ever been a loss during a landing.
- The first flight of a radio controlled model aircraft over the Atlantic Ocean takes place with the same start and end points (Newfoundland to Ireland) as the first trans-Atlantic aircraft flight.
- At the World Radio Communications conference of 2003, the Morse code requirement for an amateur radio license was made optional – up to individual countries.
- Nannette Hegerty is named the first female police chief for the city of Milwaukee.
- The first "Cubesat" satellite (not a ham satellite) is launched by a Russian Eurockot spacecraft.

- Julian Hirsch, an audio engineer and audio product technical reviewer and columnist for the magazine “*Stereo Review*”, and others, for over 40 years (having retired in 1998), passes away at the age of 81.
- The US invades Iraq (again?).
- There are 684,059 amateur radio licenses in the U.S.

## 2004

- MRAC sponsors its second VHF/UHF FM contest again winning the club category.
- For the first time in modern club history, MRAC elects officers but no one runs for President (at the normal election meeting in May). Eventually Patrick Moretti, W9UQ volunteers for the job after an earlier resignation. A special election was held at the July meeting (instead of the normal June election). The exact process of this election was questioned by many members (since there was no official advance notice of a “special” meeting as required by the by-laws) resulting in some continuing contentions. Due to work commitments, Patrick misses over half of the club meetings and many board meetings (which he said would be the case in advance of the “election”). This continues the trend which has been in place since 2003 where board and regular meetings are run by whichever officer in attendance steps up. As a result, club activities and actions dwindle to a minimum due to a lack of general leadership and organization. Meeting attendance starts declining.
- The MRAC repeater is used as a secondary net repeater for the Miller Ride for the Arts in June.
- Tom Fuszard KF9PU is re-elected Chairman – National Council OF VECs (NCVEC) at their annual meeting in Gettysburg, Pa.
- The Ozaukee County Historical Society allows MRAC to install cabinets and shelving in the basement of the train depot at Pioneer Village (which MRAC has been using as its Field Day site) to store club radio equipment and antennas – primarily for Field Day use.
- MRAC has 115 members.
- The Cassini space probe enters orbit around Saturn beginning 13 years of data gathering of the planet.
- George W. Bush wins re-election to a second term as President of the United States in a bitterly contested election (following the election debacle of 2000).
- There are 671,837 amateur radio licenses in the U.S.

## 2005

- Robert Felber, the son of the late Emil Felber W9RH (the original), donates 2 boxes full of club and amateur radio memorabilia as collected by his late father. The collection includes an apparently never used 1954 Wisconsin automobile license plate for W9RH.
- MRAC sponsors its third VHF/UHF sprint contest and for the first time did not win the club category (Badger Contesters did).
- After a hiatus of a couple of years, MRAC offers a Technician license class. It is held at Amateur Electronic Supply on Saturdays in the fall.
- The repeater is again used as a secondary repeater for the Miller Ride for the Arts as well as being used as the primary net repeater for the Great Midwest Relay event as the event passed through Waukesha and Milwaukee Counties.
- MRAC License classes also occur at another and a new location, ITT Technical Institute in Greenfield.
- Dick McNew, WB9PTC, once again returns to conducting code practice on the repeater (Mondays and Fridays). By September of 2005, health problems caused Dick to not continue with the code practice.
- Tom Fuszard KF9PU is re-elected Chairman of the National Council of VECs (NCVEC) for a third (and he says final) term at their annual meeting in Gettysburg, Pa.
- The club is contacted by Yvonne Robel of Florida. Mrs. Robel is the daughter of Clarence Crapo W9VD who was the second President (as well as holding other offices) of MRAC (1921). She donated a collection of 75 glass mount slides covering numerous club activities of the early years. Her accompanying letter appears elsewhere in this history.
- MRAC adds a Yahoo Group emailing list for members (October).
- MRAC gets its own Internet domain name – [www.w9rh.org](http://www.w9rh.org) (October) and revised web page (December). The letters MRAC are not used as they are used by a couple of other non-ham groups in other states.
- After being given space for equipment storage, and as part of maintaining good relations with Pioneer Village (where MRAC holds Field Day), a number of members get together for a Saturday work session painting some of the village buildings.
- A new repeater controller allowing computer based programming (locally and remotely) and real voice messages is installed (October). The controller is produced by S-Com Inc. of Colorado. S-Com is owned by Robert Schmid WA9FBO who attended MSOE from 1968-1973 and was a MRAC member during those years.
- The community repeater site, which MRAC is a part of, goes online with 1200 Ahr battery backup (October).
- The Drake R8B receiver is discontinued, ending Drake's involvement with amateur radio and shortwave listening. The company will concentrate on satellite television and related equipment.
- A contest is held on the NBC Tonight Show between cell phone text message record holders and 2 hams operating CW to see who can send a message faster. The hams sending CW won.
- FCC releases NPRM regarding the elimination of Morse Code tests for all license classes.

- Robert A. Moog passes away at the age of 71. Moog developed the first popular line of electronic music synthesizers (using the first voltage controlled subtractive oscillator type of synthesizer controlled by a conventional musical keyboard).
- The first video is uploaded to a new internet service called YouTube (April 23). In 2017 MRAC will upload videos there also.
- There are 662,600 amateur radio licenses in the U.S.

## 2006

- January – Dick McNew, WB9PTC once again returns to conducting code practice on the repeater (returning home from an extended hospital stay at 4 PM on a Friday afternoon and conducting the code practice at 6 PM). However he is hospitalized again within a couple of weeks. Helmut “Buck” Buchwald, K9RYW assisted by Bob Immekus W9CYI takes over in Dick’s absence and expands practice to 3 days per week (Monday, Wednesday and Friday, 1 hour each day).
- The MRAC VHF/UHF sprint contest has some new rules and new co-coordinators, Joe Schwarz, N9UX and Jeff Annis, K9VS. Badger Contesters again wins club category.
- The club history book achieves its first (of hopefully continuing) annual updates.
- The March meeting features guest speaker Gordon West WB6NOA. He was in town for Superfest beginning the next day. There were 71 people in attendance (including 18 who had never attended an MRAC meeting). The meeting was videotaped and DVD copies (with the addition of still pictures from the meeting) were created and made available. Pictures of the meeting are posted on the ARRL Wisconsin Section web site (thanks to Don Michalski W9IXG, Wisconsin Section Manager).
- John Kraak KF9XL steps down as VEC Chairman after 6+ years at the helm (January 1999 – April 2006). The committee management (Tom Fuszard KF9PU, Tom Czaja KG9EE, and Mark Tellier AB9CD), fill in resulting in no downtime, a first for a MRAC activity.
- New club announcements and repeater voice IDs were added to the repeater utilizing the capabilities of the new controller. Among the voices were Gordon West WB6NOA who recorded some announcements when he attended the March meeting. Another voice was that of Julie Cudahy, engineer and DJ for WMSE FM, the radio station owned by the Milwaukee School of Engineering. A few people complained of the voices on the repeater but they were in the minority (and most complaining were not even members).
- April 1 (notice the date) – the repeater runs voice IDs as the “N9LKH repeater” (the CW IDs remain correct as W9RH). The 145.13, MAARS repeater (the real N9LKH) runs voice IDs as W9RH. All this was done after discussions between all the technical people and Trustees of both repeaters. After a confusing uproar (confusing as to the reasons given why the joke was not proper including things like “the same call cannot be used on 2 different transmitters” and “the call can’t be used at a different address”) the MAARS repeater returned to “normal” at 9 AM. MRAC held out but also returned to “normal” at 10 AM. April 1, remember – lighten up. Plus maybe read the rules.
- At the May meeting, among others, Charles Grady KC9IIV was elected Secretary (after putting his name in to run for every office) and Sarah Parks KB9ZNC was elected Treasurer and her father Howard AB9FH was elected President. Due to health issues Charles never served as secretary and resigned. Sarah then switched over to Secretary leaving the Treasurer position open (she really didn’t want to be Treasurer anyway). While waiting for President Howard to appoint a new Treasurer, he took on the acting Treasurer duties. While this could look like a bit of a conflict (the person in charge also being the one to write checks), it could be acceptable if very short term. Unfortunately, no replacement Treasurer is found until almost one full year later! (Mark Tellier AB9CD)

- After repeated recruiting, no one steps up to be Field Day Chairman until just weeks before the event Jim Tromblay WB9LNU agrees to help Pancho KA9OFA run this year's Field Day. This is noteworthy since Jim does not even live in the area any longer (but he has traveled to Field Day each year). The club manages to come in last place for their category (5A) in scoring.
- Dick McNew once again returns to code practice, this time sharing duties with K9RYW and W9CYI (Dick does Wednesday nights).
- MRAC again returns to having a table at local hamfests starting with the Milwaukee Repeater Club Friendly Fest (October).
- Terry Sterman W9DIA (SK) Founder of Amateur Electronic Supply (and life member of MRAC) is inducted into the CQ Amateur Radio Hall Of Fame.
- January 27 – Western Union discontinues its telegram and commercial messaging services.
- The space shuttle returns to regularly scheduled flights, most to the International Space Station.
- The “social media” internet site Twitter is established (#is this less than 140 characters?).
- November - FCC releases a wide ranging Report and Order covering refarming of Novice CW sub-bands turning much of that frequency space over to voice mode. The actual changes take effect on December 15.
- December – Coming just before the end of the year (like the license restructuring of 1999/2000) FCC releases first a confusing press release and then a few days later the official Report and Order eliminating Morse Code testing requirements for all license classes. The FCC also opens the door for a possible reconsideration of some of the voice frequency allocations announced just 1 month previously.
- There are 656,068 amateur radio licenses in the U.S.

## 2007

- January – MRAC celebrates 90 years of continuous operation.
- MRAC VEC lowers the fee for testing to \$5.00 (the lowest since the program began) due to a budget surplus (for the VEC only, not the club in general). Paperwork upgrades (as a result of the coming code test changes) are free. This fee will remain through at least the current time.
- Dick McNew WB9PTC continues code practice on the club repeater, adding additional discussions about operating procedures and electronic theory to the code practice. Theory discussion led by Peter Chiu KC9IJH, with related documentation posted on the club web site.
- Again the March meeting falls immediately prior to AES Superfest and as a result MRAC is able to have Gordon West return as a guest speaker this time also joined by ARRL Marketing Manager Bob Inderbitzen NQ1R. There were 54 people in attendance.
- The test session at AES Superfest, March 31, had 100 people take a test for the largest turn out in MRAC VEC history. The large crowd was due to the recent rule change eliminating CW testing and Superfest being a popular event.
- June, Jack Krause W9JK passes away (at the age of 93). Besides holding numerous officer positions over the years, Jack was the first official manager of the MRAC VEC a position he held for 12+ years.
- June – MRAC enters the 20<sup>th</sup> century with computerized logging for Field Day as well as a PSK31 station operating for the full contest time. Also for the first time in a number of years, a CW station operated almost full time.
- July – For the first time in many, many years, a number of directors got together and performed an audit of the club's financial records and Mark Tellier AB9CD then took over as Treasurer (which should have happened about 6 months earlier).
- August (after some late planning) – MRAC holds an on-the-air special event marking the 90<sup>th</sup> anniversary of the club. While not as successful as the 85<sup>th</sup> Anniversary event, a number of HF contacts were made.
- At the insistence of the President and Acting Treasurer Howard Parks AB9FH, the MRAC VEC moves its finances out of the hands of the club Treasurer and opens their own bank account. This was in violation of the club's by-laws which specified the club perform accounting functions for the VEC. The President, Howard, as well as some board members plead ignorance of the article of the by-laws (even though it was the very last paragraph on the last page, and was its own "Article") in asking the VEC to take their money out of club accounts. VEC money was never part of the club general funds (per FCC rules) but due to problems with normal club accounting methods and misunderstanding, the VEC was told it best to handle the money themselves. This would result in the VEC having to independently incorporate, effectively becoming a separate legal entity from the club. They would retain the MRAC-VEC name (by their own choosing). This process would be complete in 2008. As a result of this whole situation, there were numerous hard feelings between the some members of the VEC and the board. All this transpired without the general club membership's knowledge nor did the membership get to vote on the matter.

- November – Dick McNew WB9PTC passes away, putting an end to on-the-air code and theory classes for at least the foreseeable future. Over about 30 years Dick was responsible for many, many hams learning the Morse code.
- Ken Hahn WK9H, a club member and VE becomes ARES Emergency Coordinator (EC) for Milwaukee County, taking over from Dan Workenaour N9ASA, also a club member.
- A decision is made to charge people who receive the Hamateur Chatter newsletter by conventional postal mail a \$10 fee in addition to the \$17 dues beginning for the 2008 club year due to immense costs associated with the printing and mailing of the newsletter (which runs at least \$1 per person per issue = \$11 per year). Email and web recipients are not charged an additional fee. This would remove the burden of printing and mailing the newsletter from the normal club finances.
- The average meeting attendance for the year was 26!
- MRAC had 117 members.
- February 24 – Code tests for all amateur license grades are eliminated.
- Victor Company of Japan (JVC) and Kenwood Corp agree to combine corporate management and home audio electronics into a new company (JVC-Kenwood). Kenwood commercial and amateur radio equipment will continue with business as usual.
- November – Motorola agrees to buy 80% of Vertex Standard (the parent company of Yaesu) for approximately \$108 million.
- October 28-29 – Using the High Frequency Active Auroral Research Program (HAARP) facility near Gakona, Alaska, the lowest frequencies ever bounced off the moon were received at the Naval Research Lab facility in New Mexico. The frequencies used were 7.4075 MHz and 9.4075 MHz.
- Andy Kissack GD0TEP and Willem Badenhorst ZS6WAB complete the world's first EME (moonbounce) contact on the 4M (70 MHz) band. The band is not available to amateurs in North America.
- With the purchase of Marketronics Corp., Hytera America Inc. is formed.
- Continuing its collection of electronic test equipment companies, Danaher Corp. acquires Tektronix Inc., a premiere maker of electronic oscilloscopes.
- Apple Computer unveils the iPhone.
- Due to poor health, Fidel Castro passes control of Cuba over to his brother Raul who would be "officially elected" as President of Cuba in 2008.
- There are 655,842 amateur radio licenses in the U.S.

## 2008

- January marks the start of sunspot cycle #24 (Friday, January 4) - Maybe. A number of weeks later show zero sunspots leading to speculation that we still at the bottom of cycle 23. In fact in September there are still zero sunspots occurring (not occurring?) on a regular basis, leading astronomers to speculate if cycle 24 has actually started at all by the end of 2008.
- MRAC partners with the Ozaukee Radio Club to conduct license classes, first with a General class held in Cedarburg.
- Larry Noldan NZ9I joins the MRAC VEC management team bring the management committee back up to 4 (after John Kraak's KF9XL retirement in 2006). This also marks the first time VEC management handles their own appointments as they are no longer officially part of the club (previously the club President would appoint VEC management as well as be involved in VEC activities).
- A budget prepared by our Treasurer shows the club has a good chance of breaking even for the coming year.
- Amateur Electronic Supply allows the MRAC VEC to install a contractor style tool box to store testing materials, at the store to make things easier for the regularly scheduled testing sessions at the store. Thanks AES!
- Once again, the March meeting of the club falls immediately prior to AES Superfest and the club is able to get a return appearance by Bob Interbitzen NQ1R, Marketing Manager of ARRL (who is in town for Superfest).
- At the March meeting Bob Inderbitzen NQ1R presented the club with a plaque from ARRL recognizing the contributions and longevity of MRAC (2009 will mark 90 years of ARRL club affiliation).
- Larry Nolden NZ9I receives an appointment to become the new Emergency Coordinator of Waukesha County ARES.
- As of June, MRAC had 81 members.
- MRAC VEC receives its own incorporation as "MRAC VEC INC". This is due to board action in 2007 which resulted in the VEC being asked to remove its finances from those of the club in general which naturally leads to its own incorporation. Is MRAC the club no longer a VEC? This spawned a flurry of email communications, special board meetings, and more to try to resolve the issue. The original "issue" was confusion and mis-understanding on the part of just 1 or 2 people on the board as to the status of the VEC monies (which were never really income for the club but an accounting liability). Plus, the existing by-laws specified the relationship of the VEC which the board seemed to ignore. The end result is MRAC-VEC Inc. becomes an independent legal entity. The membership is finally filled in on all the goings-on regarding the VEC situation at the August meeting (the membership was never told anything when all this started) which included a by-laws change to reflect the club no longer being a VEC (the article/paragraph defining the VEC operation was simply removed). Funny how now the board realized the VEC was discussed in the bylaws. Before the smoke clears, one of the VEC management resigns his club membership, one VE resigns his position and hard feelings result among some board members and others – all because the "acting" Treasurer (and then current President) couldn't figure out the separation of VEC funds.

- Due to escalating work demands, Ken Hahn WK9H resigns his position as Emergency Coordinator (EC) of Milwaukee County ARES (May).
- Bill Brossman W9EQP passes away at the age of 99. Bill was President of MRAC in 1938 and ran the Milwaukee-Florida net for many years.
- In July, Pancho Doneis KA9OFA resigns the board and his position as editor of the club newsletter after 15 years.
- At the August meeting Ted Stiller WA9RDI resigned from the board of directors after having just been re-elected in May. His resignation speech, which was given at the last second of the August club meeting while people were preparing to leave and generally not paying attention, included some questionable comments personally attacking other directors (and would be grounds for dismissal if he wasn't already resigning).
- The August and September meetings feature programs dealing with the Softrock kit SDR receiver. The club purchases one kit and offers it to a club member on the condition that they will build the kit, get it working, and discuss their trials and tribulations at least one club meeting. After a couple of months of asking, Pancho KA9OFA offers to be the Softrock experimenter. He eventually built the kit but never got it working (a single program on his progress came 1 year later – no later progress report was ever heard).
- After some last minute arrangements, the club Christmas Party, scheduled to take place Saturday December 13 ends up being cancelled due to a lack of advance reservations. This is the first time that happens since the dinners were added to the old "Old Timer's Nite" in 1979 becoming the Christmas Party.
- Richard Garriott W5KWQ, a video game developer, entrepreneur, and son of astronaut Owen Garriott W5LFL (who was the first person to operate an amateur radio station from space, aboard the space shuttle STS-9), became the sixth private citizen to pay for a trip to the International Space Station. He was to be the first person to pay for the space flight but amid some financial issues sold his seat.
- In the interest of eliminating consumer confusion and help acceptance of a new format, the HD DVD camp shuts down leaving Blu-Ray as the format for high definition DVD recording (for now at least).
- Sir Arthur C. Clarke noted author/Inventor passes away at the age of 90. Clarke was the author of 2001: A Space Odyssey (and its sequels, 2010 and 2069) as well as a number of other fiction and non-fiction books. Clarke is credited with the concept of the communications satellite (1945). A satellite geosynchronous orbit is referred to as in the Clarke orbit. Clarke was also a life member of AMSAT (Radio Amateur Satellite Corporation).
- September 28, the first privately developed liquid fuel rocket to orbit the Earth was launched. SpaceX was the company who developed, built and launched the rocket named the Falcon 1. The launch site was on Omelek Island at the U.S. Army Kwajalein Atoll (USAKA) in the Central Pacific, about 2,500 miles southwest of Hawaii. The founder of SpaceX is Elon Musk, the founder of the electronic payment firm PayPal (which brought him the money to start SpaceX and other companies).
- Barack Obama (Senator from Illinois) is elected the 44<sup>th</sup> President of the United States, the first African-American person to serve as President.

- Through a series of business and financial mishaps (and maybe some criminal activities) the world real estate and financial markets (including the U.S.) collapse. Billions of dollars are lost on various stock markets and real estate. Thousands of people are forced into foreclosure on their homes. General Motors reported a loss of \$38.7 billion for the previous fiscal year. A small handful of the largest “banks” in the US are given billions of dollars to prop up their businesses as a result of their bad investments and loans. The federal government coins the term “too big to fail” in relation to their giving money to the “banks” and other investment companies.
- The Milwaukee Brewers win the National League Baseball Wild Card position putting the team in the post season playoffs for the first time in 26 years. The team lost to the Philadelphia Phillies in the divisional playoff series 3 games to 1. Philadelphia would go on to win the World Series beating the Tampa Bay Rays 4 games to 2.
- There are 663,564 amateur radio licenses in the U.S.

## 2009

- MRAC purchases a table at the West Allis hamfest for a club exhibit but the current President fails to make arrangements to staff the table leaving it empty for the hamfest (except for the paper on the table identifying the table as being for the Milwaukee Radio Amateurs Club for all to see).
- Due to increasing demands outside of the club, Howard Parks AB9FH resigns as President of MRAC. Almost like 2003, the VP, Brian Bieger KC9HEK has been sent traveling by his job making him unavailable for most meetings. Brian (Bieger) then appoints Brian White, K9LCQ the new VP and that Brian will run meetings until a new, 1 year term President is elected at a special election called for the May meeting (to coincide with the normal election of 3 directors). Mark Tellier AB9CD runs for and is elected (with no opposition) to the special 1 year term as President. Now a new Treasurer is needed. 2009 will end and MRAC will still not have a formal Treasurer (with Mark AB9CD doing Treasurer duties as well as President – not good).
- For the first time in many years, the club operates Field Day totally off generator power. Also no “general” club picnic is scheduled for Field Day.
- The July meeting is Pancho KA9OFA discussing his progress with the Softrock SDR receiver kit the club provided in November 2008. Construction is complete but the receiver is not working (and will never be - ed).
- At the September meeting (featuring a presentation on mobile CW operating by Pat Hoppe WW9R) an unexpected visitor shows up, Harald (AI) Kjode, LA9SN from Norway. Harald also operates mobile CW but using 1000 Watts! He is also at the top of the DXCC Honor Roll, having worked 344 countries (there are 338 at that date). Harald happened to have a flash memory drive with him with a number of pictures of some of his one man DX-peditions which added another hour to our already excellent program. This was not planned to upstage Pat.
- “*Bager State Smoke Signals*” ceases publication with the June issue.
- The Military Affiliate Radio System (MARS) changes its name to the Military Auxiliary Radio System (still MARS).
- The Vibroplex Company was purchased by Scott Robbins W4PA former Ten-Tec engineer, and relocated to Knoxville, Tennessee.
- RF Concepts acquires Alpha/Power.
- All broadcast television must go to digital transmission on February 17. Most TV stations will be assigned new operating frequencies (most on UHF). Also channels from 60 on up will no longer be used for TV and the frequencies will be auctioned off. The government offers up to 2, \$40 coupons per household for the purchase of digital TV converters for those who own old “analog” TVs.
- Congress extends the date for broadcast television conversion to digital from February 17 to June 12. This was to allow more time for the general public to either purchase new TVs or converters for old TVs.
- February 11 – In a first time event, two in-tact satellites collide in space. A Russian Cosmos 2251 satellite (presumed non-operational) crashed into an operating Iridium communications satellite (one of 66 in orbit) creating at least 500 pieces of space debris.
- A historic series of 5 spacewalks is used to basically “rebuild” the Hubble space telescope, extending its useful life by years.

- Due to the poor economic conditions which began late in 2008, Chrysler and General Motors both declare bankruptcy after accepting billions of dollars from the American taxpayer. Chrysler is subsequently sold to Fiat of Italy and with taxpayer dollars, the government becomes the owner of GM.
- Michael Jackson, the self-proclaimed “King of Pop” dies under mysterious prescription drug circumstances.
- August 12 - Lester William Polsfuss (professionally known as Les Paul) guitarist, inventor, performer, born in Waukesha, Wi, died in White Plains New York at the age of 94. He is one of a handful of people who have a permanent exhibit at the Rock and Roll Hall of Fame and also has an exhibit at Discovery World in Milwaukee. He is responsible for the invention of the solid body electric guitar (Gibson guitars named a guitar model after him) as well as numerous audio recording technologies and techniques including multi-track and “sound-on-sound” recording. He was also the Godfather to Milwaukee born guitarist Steve Miller (as well as his first guitar teacher). Steve Miller himself will also be inducted to the Rock and Roll Hall of Fame in 2016. Les Paul is buried in Waukesha Wisconsin.
- There are 682,497 licensed radio amateurs in the U.S.

## 2010

- The MRAC board decides to add a late payment penalty to dues paid after May 1. For now, the penalty will be \$3.00 making late dues \$20.00. This was done to avoid a rush of people trying to pay dues at the May meeting which is usually an auction besides elections. Also, it helps to get people to pay somewhere near the time dues are actually due (January), so the club has money to operate.
- Besides late dues penalty, a decision was made to make dues for any new member who joins after September 1 essentially free for the remainder of that calendar plus \$17 for the next year (so someone who joins in September gets 16 months of membership for \$17).
- MRAC gets business cards for PR purposes.
- No one steps up to be Field Day Chairman.
- At the May election, no one runs for Vice President or Treasurer. The board will formulate a plan at the June board meeting. The club has not had an official Treasurer for 3 of the last 4 years.
- MRAC finds a local vendor for name badges and tries again to get members to buy badges.
- Due to a real Field Day (a tornado which struck the town of Eagle requiring hams to assist in disaster assessment, security and Red Cross communications), MRAC Field Day operations had no digital station. This also prevented at least 2 regulars from attending Field Day. With no Chairman and the tornado needs, Field Day is only a 2A operation by a small handful of people.
- MRAC does not meet during July and August. That is how the club operated until the early 1990's.
- MRAC finally, again has a Christmas Party, this time in association with Milwaukee Area Amateur Radio Society (MAARS), owners/operators of the 145.13 repeater. The majority of attendees are MAARS members.
- The West Allis Radio Amateur Club shuts down their repeater due to a lack of control operator support. They begin having a club net on the MATC repeater on 147.045 MHz (the old frequency of the MRAC repeater and also located at the community repeater site, but on the Channel 10 digital tower).
- West Mountain Radio, a company which produces digital radio and computer interface products and DC power control products becomes a wholly owned subsidiary of Custom Computer Services Inc. which is located in Waukesha Wisconsin.
- Dr. H. Edward Roberts passes away. Dr. Roberts was the owner of MITS (Micro Instrumentation and Telemetry Systems) producing electronic calculators. He then became the developer of the Altair 8800 microcomputer as featured on the cover of the January 1975 issue of Popular Electronics effectively starting the personal computer revolution. He also gave Bill Gates and Paul Allen their start in the computer business (they wrote the BASIC interpreter for the Altair). Roberts sold MITS in 1977 to study medicine and become a medical doctor. He was 68 when he died.

- The weekend of April 16, 17, 18 sees the use of the 1000 foot diameter radio telescope at Arecibo, Puerto Rico on 432 MHz moonbounce using the call sign KP4AO. The antenna has a gain of approximately 60 dbi, making it easier than normal for modest stations to make a moon bounce contact. 242 people made successful moonbounce contacts with the observatory that weekend.
- City of Milwaukee Police move their primary communications to the Open Sky system, a proprietary digital, encrypted communication system. It will take years and millions of dollars before the system is even partially useable (and unavailable to any commercial radio scanner).
- Dr. Fritz Sennheiser passes away at the age of 98. He was the founder and Chairman of Sennheiser Electronic GmbH & Co a German maker of headphones, microphones and related equipment.
- Stanley Tool Works and Black & Decker merge to form Stanley Black & Decker Inc. This covers the brands Stanley, Black & Decker, DeWalt, Porter Cable, Bostitch, Mac Tools, Proto Tools, Jensen Tools and Supply, and many more.
- There are 696,041 licensed amateurs in the US.

## 2011

- MRAC votes on changes to the by-laws re-creating Student membership (this time with free dues) and changing the officer election process to that used from 1917 – 1951 – electing directors only and then the directors select officers from those on the board. The changes are approved only after much discussion and a number of dissenting votes.
- MRAC attempts a Hamfest partnering with the Milwaukee Area Amateur Radio Society (MAARS), just like the Christmas party. The Hamfest is held at the Channel 10/36 Friends Auction building (due to Dave Schank KA9WXN) in Brookfield on Saturday, February 19. Amazingly, it turns a profit in its first year based on more than 40 vendor tables and 220 tickets sold (about \$500 for each club).
- MRAC secures the use of Redemption Lutheran Church (where meetings are currently held) for a Saturday morning pancake breakfast open to all area hams. This is also held in conjunction with MAARS. They had their first pancake breakfast in 2010 at a person's house. Unfortunately, due to a number of circumstances, the turnout is light.
- The late dues penalty is shifted to April 1 since elections now take place in April instead of May.
- Gordon West WB6NOA makes his third appearance at a MRAC meeting. This was because the March meeting fell immediately prior to AES Superfest again.
- Once again, no one steps up to be Field Day Chairman, so in continuing our working relationship with MAARS, Field Day planning is turned over to them. Dave Schank KA9WXN and Al Maahs KC9IJJ MRAC board members and MAARS members do the job.
- MRAC Field Day operations move to Konkel Park in Greenfield in partnership with MAARS (Milwaukee Area Amateur Radio Society - 145.13 repeater club). In order to maintain relations with Ozaukee County Historical Society and Pioneer Village, a secondary, un-official Field Day operation is operated at Pioneer Village in Ozaukee County under the call sign of AB9CD, Mark Tellier.
- CQ Magazine sends a photographer (Larry Mulvehill WB2ZPI) to spend Field Day weekend with MRAC. Besides our Field Day operations, he also takes pictures of the community repeater site, WMVS and WMVT TV transmitters, and the Gateway Technical College Field Day operations (advised by MRAC's own Pat Hoppe WW9R). Pictures of WMVT TV transmitter with MRAC member and Director Dave Schank KA9WXN appear on the cover of the October 2011 issue of *Popular Communications* magazine. Two of the Field Day pictures as well as one picture from the Gateway Tech College Field Day and one picture from the community repeater site also with Dave Schank KA9WXN appear in the 2012 CQ Amateur Radio Calendar including the front cover. The cover image is also used in ads for the calendar over a number of months in numerous CQ publications. More of the pictures taken that weekend will appear in various CQ publications in future years.
- For the first time, the forums as presented at Superfest are streamed live over the Internet. The technical manpower behind this is MRAC's own Dave Schank KA9WXN and Al Maahs KC9IJJ.
- Leo Meyerson W0GFQ founder of World Radio Labs, maker of the Globe and Galaxy lines of amateur equipment as well as the World Radio Labs retail store passes away in April at the age of 100.

- May 24 marks the debut episode of the Internet based video ham news and features program called Ham Nation. The program is hosted by Bob Heil K9EID (of Heil Sound) and Gordon West WB6NOA. The program appears weekly, Tuesday evenings at 8 PM Central time. It is hosted on the T.W.I.T. (This Week in Technology) web site operated by Leo LaPorte a technology broadcaster who subsequently became a ham himself with the call W6TWT.
- Dr. Sidney Harman founder of Harman/Kardon (1953) a manufacturer of audio electronics and the developer of the first stereo receiver (incorporating preamp, power amp, and radio tuner), passes away at the age of 92.
- Edgar M. Villchur passed away at the age of 94. Mr. Villchur was the developer of the acoustic suspension loudspeaker (1954) and cofounder of Acoustic Research along with Henry Kloss. The company's model AR-3 speaker is on display at the Smithsonian Institution.
- Steve Jobs, who founded Apple Computer along with Steve Wozniak (a former ham) in 1976 and served as the company's CEO, passes away at the age of 56.
- The last Space Shuttle flight takes place, signaling a temporary (hopefully) end to US manned space flights.
- Motorola splits into two companies, Motorola Solutions and Motorola Mobility. Mobility is the cellular telephone company first owned by Google and then sold to Lenovo while Solutions is the radio communications company.
- The Green Bay Packers beat the Pittsburgh Steelers 31-25 in Super Bowl XLV.
- The Milwaukee Brewers Baseball team win the National League Central Division title. They lose the league championship to St. Louis who then go on to win the World Series. St. Louis was the team which beat the Brewers in the 1982 World Series (when the Brewers were in the American League and were league champions).
- There are 702,056 licensed radio amateurs in the U.S.

## 2012

- The FM simplex contest featured a 95<sup>th</sup> club anniversary certificate to all who contacted the W9RH station in the contest. MRAC once again wins the club category of the contest (but Badger Contesters are still ahead overall by one win).
- MRAC and MAARS held our second joint hamfest at the channel 10 auction site. Prizes were offered for the first time this year including a donation of the N3FJP logging software suite (donated by N3FJP) and a mobile VHF/UHF antenna donated by the RF Adapter Guy. 55 tables and 300 admission tickets were sold, an increase over 2010. The two clubs each pocketed \$766 profit (that was after providing pizza and soda to all volunteers who cleaned up after the fest on Saturday afternoon). That was almost a 50% increase in profit over 2011!
- The February MRAC meeting acts as a late holiday / 95<sup>th</sup> Anniversary / successful hamfest / club member celebration party along with MAARS featuring free food (courtesy of Hamfest profits as well as Al Maahs KC9IJJ and Dave Schank KA9WXN).
- The March MRAC meeting again falls immediately prior to AES Superfest which allowed Gordon West WB6NOA to make his fourth appearance at an MRAC meeting. Gordo was joined by his book publisher Pete Trotter KB9SMG.
- MRAC operates a special event HF station for its 95<sup>th</sup> anniversary during Superfest at Amateur Electronic Supply. The demo radios at the front of the store are offered for our use and the club table is also located there, making us the first thing people see when entering the store. 6 members as well as Gordon West operate the radios for 2 hours Friday and 6 hours Saturday making over 200 contacts with stations all over the world.
- In time for the annual auction, 2 non-members donate a large amount of radio and audio equipment which along with other donated items for auction brings the total club income from the auction to just under \$1600! With plenty of PR and the amount of donated equipment, there were 42 people in attendance which included 16 visitors.
- The MRAC repeater is once again used as a secondary repeater for the Miller Ride for the Arts.
- MRAC once again participates in Field Day along with MAARS. This year Amateur Electronic Supply provides a brand new Icom IC-9100 (about a \$4000 HF/VHF/UHF radio) for our operations.
- In June the first set of officers under the new bylaws (modeled after those in place prior to 1951) step up from those directors elected in the general election. Dave Schank KA9WXN takes over the job of President. This is in addition to being President of MAARS, Chairman of the Wisconsin Association of Repeaters, and being on the board of the West Allis radio club.
- In August MRAC joined in hosting a picnic with MAARS. Over 65 people attended. At the picnic a low key special event operation for the club's 95<sup>th</sup> anniversary was also held (sort of part 3 for the year) including making special event contacts on the club repeater.
- October 9 – Weekly on the air license classes / discussion begins on the club repeater every Tuesday and the MAARS repeater (145.13 MHz) every Thursday. The classes start with General class and will continue with Extra. The classes are conducted by Erv Roman N9YNU (while he himself was studying for his General – and then passed Nov. 24).

- November 4 - The MRAC repeater is used as a backup frequency (simplex was the primary) for the Jingle Bell Run at the Milwaukee County Zoo. The run is a fund raiser for the Arthritis Foundation.
- December 1 – The State of Wisconsin issues a proclamation designating January 17, 2013 as Milwaukee Radio Amateurs' Club Inc. Day in the state to commemorate the completed 95<sup>th</sup> anniversary of the club.
- Motorola spins off Yaesu Munsen (January 1, 2012) which will produce amateur radio, marine, and aircraft equipment while keeping the Vertex and Standard commercial land-mobile business for themselves. The new company was purchased by the original Yaesu company founder. If he did not buy the ham and other operations, there was a possibility that Motorola would shut down the ham business.
- Fred Maya W5YI, the man behind one of the first VECs, the founder of the National Council of Volunteer Examiners (NCVEC), writer of numerous amateur radio magazine articles, book publisher and all around amateur radio legal and historical expert passes away at the age of 75 (3/28/12).
- Dick Baldwin W1RU passes away (6/21/12) at the age of 92. He was General Manager and VP of ARRL from 1975-1982. He was Secretary of the International Amateur Radio Union (IARU) from 1976-1982. He then retired from ARRL and became President of IARU from 1982-1992 overlapping with ARRL International Affairs VP from 1982-1986. Dick attended not one but two MRAC Old Timers Nite / Christmas Parties in both 1979 (for our 60<sup>th</sup> anniversary of ARRL affiliation) and again in 1980.
- Jack Tramiel passes away at the age of 83. Jack was the founder of Commodore International, the company which produced the first personal computer to pass the 1 million units sold (in 1982) milestone with the VIC-20 computer.
- Larry Mulvehill WB2ZPI is inducted into the CQ Amateur Radio Hall Of Fame. Larry is the photographer for CQ magazine and its related publications for 30 years. CQ sent Larry to Milwaukee to photograph the MRAC / MAARS Field Day operation in 2011. His work resulted in the club and its members being featured on the cover and 4 months of the CQ Amateur Radio Calendar for 2012 and a cover of Popular Communications for October 2011 (and even more, see 2013 entries).
- The unmanned mobile exploration vehicle, "*Curiosity*" lands perfectly on the surface of Mars.
- Heath Educational Systems (the former Heathkit) filed for bankruptcy after defaulting on its loans and abandoning its office space.
- Walt Maxwell W2DU passes away at the age of 92. Walt was the author of a series of QST articles. "*Another Look at Reflections*" and the book "*Reflections: Transmission Lines and Antennas*" which both fully described the effects of SWR, line loss, baluns, and antenna tuners.
- The Milwaukee Fire Department joins the Milwaukee Police Department on its *OpenSky* radio system.
- There are about 709,575 licensed amateurs in the U.S.

## 2013

- Thursday January 17 is designated the Milwaukee Radio Amateurs' Club Inc. Day in Wisconsin by Governor Scott Walker (in recognition of our 95<sup>th</sup> anniversary in 2012).
- Due to the recent trend of people bringing radios to Field Day, the club decides to sell the two radios it owns (and have not been used in the last 3 Field Days) and use the money for antennas and related equipment. As part of that focus, the club purchases a Cushcraft MA-5 mini-beam from the estate of a silent key (the estate being handled by Mark Tellier AB9CD and the items being sold at our hamfest in February). MRAC sells one of its radios (Heath SB-104) and power supply to club member Mark Tellier AB9CD. The Kenwood TS-430 is sold to Ron Crown KA9JCP, as well as a tri-band beam (Cushcraft A-3S) to Charles Merten W9CHD. Unfortunately, the MA-5 was not functional and still requires work.
- MRAC and MAARS hold their 3<sup>rd</sup> annual hamfest. Each club pocketed a profit of about \$650.
- Once again, the February MRAC meeting acts as a late holiday / Anniversary / successful hamfest / club member celebration party along with MAARS featuring free food (courtesy of Hamfest profits as well as Al Maahs KC9IJJ (doing most of the cooking) and Dave Schank KA9WXN).
- DVD-ROMs of the club history distributed to members and other interested parties now contain a series of short (5-15 minute) videos of the photo album / scrapbook instead of a Microsoft PowerPoint slide show. Currently the videos are 99% silent. Proper soundtracks are currently on the to-do list.
- The April issue of CQ magazine (page 57) contains a picture of Al Maahs KC9IJJ operating his station portable, as taken by CQ photographer Larry Mulvehill WB2ZPI at the MRAC / MAARS Field Day in 2011. This picture joins others which previously appeared in the CQ 2012 calendar and Popular Communications magazine.
- The CQ 2013-2014 calendar contains yet more pictures from the MRAC / MAARS Field Day of 2011 – 4 months and both the front and back covers. Subjects were Jim KB9KBK, Pat Hoppe WW9R, Al Maahs KC9IJJ and the garaged cars of Dave DeFebo WB9BWP.
- The second ever J. Travis Baird award (the first was in 2002) is presented to Dave DeFebo WB9BWP in recognition of his years of service to MRAC and amateur radio (not to mention his paying more membership dues than any previous member – ed. Just had to say that).
- The Gateway Technical College (GTC, of Racine) radio club, under the guidance of MRAC member Pat Hoppe WW9R, joins MRAC and MAARS at this year's Field Day. This year also marks a return of the GOTA (Get On The Air) station at Field Day (absent since 2008).
- Amateur Electronic Supply once again loans a new radio to the MRAC / MAARS / GTC Field Day operations. This year it is a Yaesu FTDX-1200.
- Due to some questionable actions and communications on the club repeater by just a couple of people, the club creates its first written policy for the use of the repeater.
- For the first time since Superfest was started (1994) by Amateur Electronic Supply in Milwaukee, Gordon West WB6NOA does not make an appearance.

- It is announced that 2013 was the last year for the current version of AES Superfest. Hopefully it will return under the guidance of a number of local clubs and include a flea market. But ... (see next year).
- William "Bill" Kasuga, founder of Kenwood USA passes away at the age of 98.
- July – Bob Grove W8JHD founder and publisher of *Monitoring Times* magazine announces his retirement and the ceasing of publication of the magazine with the December 2013 issue.
- Wayne Green W2NSD ("Never Say Die"), who was RTTY columnist for CQ Magazine from 1951-1955 then editor of CQ magazine from 1955-1960 and then founded and ran 73 magazine for its entire run from 1960-2003 passes away at the age of 91. He was also the founder of Byte, Kilobaud, 80 Microcomputing, Rainbow and other computer magazines during the 1980s.
- Jack Althouse K6NY President of Palomar Engineers, a distributor of ferrite and antenna products passes away. He was also "technical consultant" to the Kurt N. Sterba column in World Radio magazine.
- George Hart W1NJM, who while at the ARRL, was the chief architect of the National Traffic System (NTS) passes away at the age of 99.
- October 9, the NASA exploration satellite JUNO on its way to Jupiter circles around the earth (coming as close as 23,250 miles) in the slingshot effect to launch it to Jupiter. During this time, radio amateurs around the world are asked to send the message HI in very slow CW (and synchronized using the internet) on the 10 M band in an effort to test some of the RF sensors aboard the spacecraft. The test is successful with the spacecraft "hearing" the message sent. QSL cards are sent to all who participated.
- Dr. Amar Bose, founder and CEO of the audio products company Bose Corporation passes away at the age of 83.
- Due to budget issues the High Frequency Active Auroral Research Program (HAARP) operation in Alaska is shut down.
- The Eastman Kodak Company emerges from bankruptcy as a company involved in commercial imaging. Gone are cameras, film, photo printing and all consumer business. The new company will have about 8500 employees, down from a high of 145,000 in the 1980s. Digital cameras are blamed for the company's decline. Interestingly, Kodak received the first patents on digital imaging. Yet another example of a company afraid to step on their own cash-cow only to have other companies follow through.
- CQ Magazine, just before the end of the year, announces it is "realigning" its roster of magazines, eliminating print editions of *CQ VHF*, *World Radio*, and *Popular Communications*, and adding content from those magazines to the digital version of *CQ Magazine* (not the print version).
- The city of Detroit becomes the largest city to ever declare bankruptcy.
- Ryan Braun, Milwaukee Brewers outfielder is suspended 62 games for the use of performance enhancing drugs.

- Daly's Pen Shop closes its downtown location (in the Plankington Arcade portion of the Grand Avenue Mall (or Shops at Grand Avenue, whichever you prefer), after being downtown since 1924. They have had a second location at 76<sup>th</sup> and Burleigh which now will be their only location. They are leaving Grand Avenue as there is not enough foot traffic in the building to generate sales.
- There are 717,201 licensed amateurs in the U.S.

## 2014

- MRAC is selected as one of about 100 test installations of the new Yaesu Fusion Digital Voice / Data Repeater. It replaces the GE Mstr II Repeater. The repeater is installed in time for live demos during AES Superfest. This is one of only 2 installations of a Yaesu Fusion system repeater in the state of Wisconsin. MRAC is also given a System Fusion HT and mobile radio by Yaesu for use with the repeater.
- AES Superfest takes place as in the past, but this time as a single day event with less space available for club tables and no Gordon West. One of the technical forums is "*The History of The Milwaukee Radio Amateurs' Club, 97 Years and Counting*" by Dave DeFebo WB9BWP.
- MRAC is involved in a high altitude balloon launch. The W9RH call is used on the APRS tracker aboard the balloon.
- To commemorate the 100<sup>th</sup> anniversary of the ARRL, each state will have W1AW portable operations at least twice during the year. For the first Wisconsin W1AW/9 operations in February, the Society of Midwest Contesters will have some of its members operate. Pat Hoppe WW9R, MRAC member as well as Gateway Technical College Radio Club advisor will be one of the operators. He also checked into the MRAC Friday night 10M net to make W1AW/9 available to net check-ins.
- For the second round of Wisconsin operations for W1AW/9, Pat Hoppe WW9R will again be one of the operators. Again he will give contacts on the MRAC Friday night 10 M net.
- MRAC is named in the will of Jim Fischer W9LPF to receive his radio equipment.
- Starting during the month of July, a new net starts on the MRAC repeater (Saturday nights at 7 PM), and this one covering the growing usage of the Yaesu Fusion digital radios. This may be the first Fusion digital voice net in the country. The net was the idea of Steve Sundquist N9FSE based on a suggestion by Leroy Skalstad WD9HOT and ends up being run by Leroy.
- July 18-19 The ARRL sponsors a special National Convention in Connecticut to celebrate 100 years in operation. The convention includes a special day (Thursday July 17) of day long specialized topic conferences. At least 3 MRAC members are in attendance.
- September sees the second high altitude balloon launch with some MRAC involvement. Joe Schwarz N9UX is the project leader with Erv Romans N9YNU serving as mission control. Steve Sundquist N9FSE and Mark Tellier AB9CD are part of the chase / recovery team. Unfortunately, the balloon lands in a marsh making recovery impossible at this time (it will be recovered early next year).
- The March/April issue of CQ Magazine contains an article by Theodore J. Cohen N4XX (previously W9VZL) entitled "*Set Another Place For Sister Margaret*" detailing his experiences as a Jewish teenager (starting in 1953) handling CW traffic between Madison and Milwaukee for the Catholic Church (who had contacted MRAC). Mr. Cohen was a MRAC member at the time and the article mentions then MRAC President, Ken Eggert W9MOT. The article is reprinted later in this book (courtesy of CQ Magazine and Ted).

- The September issue of CQ magazine contains yet another picture from the Field Day 2011 photo work of Larry Mulvehill WB2ZPI, CQ photographer. Once again Dave Schank KA9WXN is the subject of the picture (at his home station). There is also a single column article within the magazine with MRAC getting a mention of course.
- The Milwaukee Maker organization puts on the first Milwaukee Maker Faire at State Fair Park. It is run in conjunction with a free event called "Harvest Fair". 35,000 people attend.
- Tokyo High Power Labs, a manufacturer of antenna tuners and RF power amplifiers, files for bankruptcy.
- William Moerner, WN6I a professor of chemistry at Stanford University in California is awarded a Nobel Prize (shared with 2 other non-hams Eric Betzig and Stefan Hell) for their work in high-resolution microscopy or nanoscopy.
- Alpha Amplifiers (RF Concepts) and Ten-Tec merge. They will retain their respective manufacturing facilities, but management will consolidate.
- Agilent Technologies, the test equipment company spun out of Hewlett Packard in 1999 announces that by the end of 2014 the electronic test and measurement equipment operations will be spun off into yet another separate company, Keysight Technologies. Agilent's products will be medical and scientific instruments and life science materials. Keysight begins operations in August.
- JVC-Kenwood purchases EFJ Technologies – E.F. Johnson Company, to broaden the Land Mobile offerings of Kenwood Communications in the P25 Digital radio and systems area.
- The state of Colorado begins the legal commercial sales of marijuana for personal, recreational use.
- After leading the National League Central division for 150 days, the Milwaukee Brewers collapse in August and September to fall out of first place (finished 3<sup>rd</sup>) and do not make the playoffs (ending up 6 games behind for a wild-card playoff spot). Their final record was 82-80 after going 9-22 during the last month of play.

## 2015

- MRAC applies for a special price promotion for the new version of the Yaesu System Fusion repeater. We may also be able to keep the “beta” version of the repeater which has been in operation for 1 year.
- The March meeting is held one week early to accommodate representatives from Yaesu who are in town for AES Superfest and some other business. Besides doing a presentation on new Yaesu equipment including System Fusion Yaesu donated a Fusion capable HT (\$400 value) which was given away via a drawing at the meeting. Charlie Kremer KC9CEQ won the radio.
- At the 2015 AES Superfest another MRAC member, Dave Schank KA9WXN, puts on a presentation, this time on the Wisconsin Association of Repeaters (which Dave is Chairman of besides being MRAC President, and MAARS President, and probably other officers too).
- Gordon West WB6NOA is made an honorary member of MRAC to recognize his promotion of amateur radio as well as his activities with the club (attending 4 meetings and operating in the club’s 95<sup>th</sup> anniversary special event operation at AES as well as providing voice announcements for the old analog repeater system.
- As a result of some freezing weather, freezing the marsh, the balloon launched last September was recovered intact. The payload is displayed at the MRAC / MAARS hamfest. The Baofeng HT which flew in the balloon is auctioned off at the MRAC auction in May complete with a certificate of authenticity for the radio. It sold at auction for more than the new price of the radio.
- The MRAC FM Simplex contest adds an extra half hour of operation for all types of digital voice methods, currently D-Star, Yaesu C4FM, P25, and DMR. Is this the first mixed mode (analog and digital) voice contest anywhere?
- The MRAC repeater is again used as an auxiliary net control frequency for the UPAF Ride for the Arts Bike Ride Sunday May 31. The main net frequency is the MAARS repeater of 145.13 MHz.
- Field Day for MRAC sees the first use of a mobile pneumatic mast for the main HF antenna. The mast was purchased by Dave Schank KA9WXN at Dayton Hamfest and has additional outriggers fabricated by the Field Day chef, Barry Sprifke W9BLS.
- Amateur Electronic Supply once again loans MRAC an HF radio for Field Day use, this time a Kenwood TS-590SG.
- MRAC has a booth at the second Milwaukee Maker Faire. The fair runs for 2 days at State Fair Park during Harvest Fair. AES loans an ICOM 7600 HF transceiver for the exhibit. The Maker Faire drew at least 45,000 people.
- Due to problems with the MATC repeater (147.045 MHz), the West Allis Radio Amateur Club uses the MRAC repeater for its weekly net for a few weeks (it will eventually move to the SEWFARS VHF repeater).
- The FCC following government logic removes the fee for amateur vanity call signs because the fee does not cover the processing costs, so it’s better to not charge any fee at all.
- CQ Magazine announces the ceasing of a “CQ Plus” digital magazine which was CQ plus content from the previous publications CQ VHF, Popular Communications, and World Radio. The digital version of CQ will be identical to the print edition.

- A DX-pedition activates Navassa Island for the first time in 32 years. Over 100,000 QSOs have been made.
- QSC Technologies, the contract design and assembly company which has been assembling Alpha amplifiers purchases RF Concepts, the company behind Alpha Amplifiers and also recently, Ten-Tec. The amateur equipment company will be under the design operation RKR Designs.
- Bill Pasternak WA6ITF, co-founder of the *Westlink Report* (with Jim Hendershot, WA6VQP) which became *Amateur Radio Newsline*, as well as creator of the Young Ham of the Year Award passes away at the age of 73. He was also the only person to ever receive two awards from the Dayton Hamvention, the Special Achievement (1981) and Radio Amateur of the Year (1989). Bill was also the author of numerous magazine columns and articles over his 56 year ham career.
- September 30 – Navy / Marine Corps Mars (NAVMARCORMARS) operations close down leaving Army and Air Force MARS operations remaining. The Navy MARS repeater which shares the community repeater site with MRAC (being the only other VHF transmitter there) becomes an Air Force Mars repeater (and property).
- Wes Schum W9DYV the founder and creator of the Central Electronics Company passes away. Central Electronics was instrumental in the use of SSB in ham equipment.
- CQ Magazine announces availability of CDs of back issues for 2014 and 2015. A first for the magazine.
- Rockwell / Collins announces that mechanical filter production will be ending at some future unannounced date.
- After an absence of many years, The Milwaukee Journal / Sentinel reintroduces the “Green Sheet” to the daily paper in May.
- After a number of years of losses as well as a loss of respect, Radio Shack declares bankruptcy. Half of their stores are sold to the parent of Sprint, to be (nobody knows yet). The other half are closed.
- Journal Communications which owns the Milwaukee Journal Sentinel, WTMJ TV, WTMJ AM radio and WKTI FM radio, besides other radio and TV stations throughout the country merges with E. W. Scripps Co. also a print and radio and TV media company. At that time, Scripps spun out all print (newspaper, including the Milwaukee Journal-Sentinel) companies into a new public company, Journal Media Group. That company will eventually be purchased by the company which owns the USA Today national newspaper.
- Alan H. “Bud” Selig retires from the position of Commissioner of Major League Baseball. He is then named Commissioner Emeritus of Baseball (at a fairly nice payroll too). Throughout his time as Commissioner and now as Commissioner Emeritus, Selig has maintained his office in Milwaukee.
- There are 735,405 licensed amateurs in the US at the close of the year.

## 2016

- MRAC holds a contest to have a new logo for the club's 100<sup>th</sup> anniversary. The eventual winner is Jeff Geil N9EDQ.
- The MRAC / MAARS hamfest has a grand prize of a Yaesu FTM-8900 2M 70W radio. The winner is Jim Westover KB9KBK.
- Bob Inderbitzen NQ1R, Marketing Mgr. of ARRL guests at the March meeting (his third appearance at an MRAC meeting), not as a featured speaker but as a guest. He offers some suggestions for the MRAC 100<sup>th</sup> anniversary. MRAC also surprises Bob by making him an Honorary member of MRAC joining Gordon West WB6NOA in that elite category.
- 2016 AES Superfest sees yet another MRAC member put on a presentation. This time it is Joe Schwarz N9UX and the subject is high altitude balloon launches.
- During the Saturday of the Dayton Hamvention (5/21/2016), MRAC in conjunction with AES sponsor an "alternative" swapfest to Dayton for those not attending the big one. The flea market takes place in the AES front parking lot. The club made \$35 in donations in this experiment.
- The Field Day operations of the club (and still in partnership MAARS) move to the South campus of MATC. Konkel Park was expanding their facilities leaving no room for the clubs to operate. At MATC the clubs will be located in the Fire and Police training area, having access to a fire training burn building as well as other accessible tall structures meaning no tower or telescoping masts will be needed to raise antennas (the available building tops provide 35 – 45 feet of elevation). Amateur Electronic Supply again loans a radio to the club for the event, this year an Icom IC-7600.
- July 6 – Amateur Electronic Supply announces it will go out of business at the end of July, closing all stores and the business after 59 years!
- The Milwaukee Journal / Sentinel does a story on Amateur Electronic Supply going out of business. Four MRAC members are interviewed and quoted in the article. They are Tom Pachner W9TJP (also AES store manager), Dave Schank KA9WXN, Dan Workenaour N9ASA and Dave DeFebo WB9BWP.
- July 12 – Ham Radio Outlet announces it will offer employment to many AES employees of the Ohio, Florida and Nevada stores (relocating them to various HRO locations), and will remodel and reopen the Milwaukee store (as HRO – Milwaukee) as the largest ham radio showroom in North America.
- August 27 – Ham Radio Outlet opens its newest store in the former Amateur Electronic Supply Milwaukee storefront. For each Saturday in October the major ham equipment manufacturers will help HRO celebrate an "official" grand opening. Each week features an area club operating a special event station. MRAC operates the second week using an Icom radio supplied by the Icom rep in town for the event.
- MRAC again has a booth at the Milwaukee Maker Faire. This year the booth features some of the equipment used in the high altitude balloon flights. The club was even invited to smaller faires planned for Pleasant Prairie and Madison. Those decisions need discussion. There is also the possibility of partnering with West Mountain Radio for the next Faire.
- MRAC meeting attendance for the year averages 21.3.

- The assets of Ten-Tec are purchased by Dishtronix from RKR Designs. Dishtronix produces solid state power amplifiers for the amateur market. They are also an electronics design and consulting firm. RKR had purchased the combined Alpha and Ten-Tec from RF Concepts in 2015. One of the first steps taken under the new ownership is the ending of free service consulting. Ten-Tec service had been operating at a loss. Now there will be a charge to diagnose a problem (it seems some hams would send in a radio, get the problem diagnosed for free, have the radio returned and make the repair themselves or by other means).
- ARRL CEO Dave Sumner K1ZZ retires from ARRL after 40+ years of service. Also, ARRL COO Harold Kramer WJ1B retires after 11 years of service.
- In conjunction with the 100<sup>th</sup> anniversary of the U.S. National Parks system, and after the success of the ARRL centennial operation in 2015, ARRL sponsors “National Parks on the Air” throughout 2016.
- Dave Bell W6AQ, Hollywood Producer as well as producer and director of numerous amateur radio and ARRL PR films / videos including the first TV documentary on amateur radio, “The Ham’s Wide World” passed away at the age of 84. Bell and his wife Sam W6QLT, also in 2015 donated an Andy Warhol print to ARRL which at auction raised \$150,000 for ARRL.
- July 4 – the Juno interplanetary research satellite (see also the 2013 entry) reaches the planet Jupiter. The next day (July 5) the satellite enters orbit around Jupiter. It is to make 33 orbits around the planet before falling into its atmosphere. The satellite’s mission is to look for solid planetary core, map magnetic field, measure water and ammonia in deep atmosphere, and observe auroras, all in an effort to better understand the largest planet in our solar system.
- The National Geographic Channel (cable TV network) airs a series entitled “Mars” taking place in 2033 and later years. The show also features commentary and information in the present time by numerous scientists and others in the space field. An internet only prequel to the series deals with the childhood of 2 of the main characters and details the role amateur radio plays in their future careers.
- On the informational web page for the National Geographic cable TV channel series “Mars”, there is an article titled “A Guide To Ham Radio” which features a picture of a ham and his wife listening to radio signals from the Sputnik satellite. While his call is not listed, the ham was MRAC’s own Dick Oberholtzer W9ZPV! Unfortunately, the photo is owned by Getty Images and MRAC can not use it without paying a fee (\$575 at the time).
- Kenwood introduces the TH-D74 handheld. It covers the 2M, 1-1/4M, and 70cm bands including a TNC and APRS functionality. It also is the first non-Icom radio introduced in the US with DStar capability (not counting the computer based DStar access items like a Dvap or DV4).
- The last VCR (Video Cassette Recorder for those who may not know) comes off the assembly line at Funai Electric Company of Japan.
- Ground is broken on a new sports arena for the Milwaukee Bucks basketball team. This will replace the Bradley Center arena which will be torn down. The Milwaukee Admirals minor league hockey team was not invited to join in the new arena and will return to playing its games in the soon to be remodeled Milwaukee Arena (now called the UWM Panthers Arena).

- The Chicago Cubs baseball team win the World Series. They last won the series 108 years ago.
- The Journal Media Group (publisher of the Milwaukee Journal-Sentinel) is acquired by Gannett Company, publishers of many local newspapers as well as USA Today, a national newspaper. The broadcast properties owned by Journal Media are acquired by Scripps Co.
- Milwaukee born guitarist Steve Miller is inducted into the Rock and Roll Hall of Fame in Cleveland, Ohio. The event had some controversy regarding who would give the induction speech and some comments by Miller during his acceptance speech as well as the press event following his induction.
- There are 742,787 licensed amateurs in the US at the close of the year.

## 2017

- January - MRAC is 100 years old!
- In honor of the club's 100<sup>th</sup> anniversary, a short (15 minute) historical overview video is produced. It had its world premiere at the February food meeting. It was also posted on the web site "YouTube" for the world to view.
- Various members operate from their home stations on various days and weekends throughout the year as W9RH/100 to commemorate MRAC's 100<sup>th</sup> birthday. Operations also take place at the HRO Parking Lot Hamfest as well as the MAARS / MRAC picnic, Maker Faire and HRO Superfest.
- The MRAC / MAARS hamfest moves from the channel 10 auction building (building no longer available and is soon sold) to the Elk's Lodge on Good Hope Rd., across the street from the HRO store. The date of the hamfest also moves from February to April 1. That would have been the date of AES Superfest had AES stayed in business. The hamfest has a grand prize of a Yaesu FTM-3200DR 2M analog and digital voice (C4FM-Fusion) high power (65 W) radio. The winner is Brian Feltz WB9E from Junction City, Wi. Upon receiving the prize, he promptly (and publically) gave it to his son Jacob K9TVG who was celebrating his 16<sup>th</sup> birthday on the day of the hamfest. That brought a round of applause from the crowd.
- ARRL Central Division Director Kermit Carlson W9XA is the speaker for the March MRAC meeting and presents a plaque from ARRL to MRAC commemorating its 100<sup>th</sup> anniversary. There was also a resolution read into the ARRL board meeting minutes at their January meeting (the resolution was proposed by Kermit).
- MRAC is contacted by a teacher with Hales Corners Lutheran School about applying for an ARISS (Amateur Radio on the International Space Station) school contact. MRAC did work with the school in applying for the contact but ultimately the school was not selected. This however led to a much larger club project. Details appear later in the year.
- June 17 MRAC stages a special event operation for the club's 100<sup>th</sup> anniversary at the House of Harley-Davidson motorcycle dealership.
- The LeFrog radio group based in Ozaukee County, joins MRAC and MAARS for Field Day this year. LeFrog supplies 2 - 4 element HF Yagis and an Icom IC-9100 radio as well as a CW operator in the form of Tom Murtaugh W9VBQ. Tom is featured in the picture of club members in front of the MRAC communications van for Field Day in 1952. He is center of the front row of people lined up in front of the van. He was 15 at that time. He is also in a Milwaukee Journal picture from the same Field Day.
- Amateur Radio Newline runs a story on MRAC being 100 years old (Newline edition #2070, 6/30/2017). Dave DeFebo WB9BWP was interviewed for the story (after Dan Workenaour N9ASA was contacted and he passed it down to Dave D. via Dave Schank). The interview begins at the 7:41 point. See if you can catch the mistake made by Dave during the interview.
- MRAC creates a presence on the web site YouTube. The first video uploaded by the club is its 15+ minute 100<sup>th</sup> anniversary video.

- At this years Maker Faire, MRAC was awarded a “Maker of Merit” blue ribbon for their display which included a station as W9RH/100 operating from a communications trailer owned by Barry Sprifke W9BLS. The trailer was adjoining the club booth and INDOORS (antenna was outside).
- HRO Resurrects the old “Superfest”, this time being 2 full days. Club member Dave DeFebo WB9BWP presents a forum on MRAC turning 100 (after doing one on the way to 100 3 years earlier).
- At the HRO Superfest, ARRL, courtesy of Bob Inderbitzen NQ1R, ARRL Marketing Manager and MRAC Honorary member, provides a birthday cake and 250 cupcakes to celebrate MRAC’s 100<sup>th</sup> birthday. The cake was presented and served at 12:45 PM, complete with the singing of “Happy Birthday”, at the end of Dave DeFebo’s WB9BWP forum presentation on the club.
- The local HRO store through Tom Pachner W9TNP offered the club use of 2M and 70 CM cross yagis and a Yaesu Az-El rotor if we wanted to embark on a satellite station setup. The equipment was previously installed by Amateur Electronic Supply and was not needed by HRO. The club organized monthly work meetings to take place at the store using the classroom / meeting room and even some of the warehouse space. HRO also offered some vacant office space for equipment storage.
- Saturday, October 21 is a dinner celebrating the club’s 100<sup>th</sup> birthday. The location was Carl’s Catering, 5110 W. Loomis Rd, Greendale. For the adding of a dinner to the (at the time) annual “Old Timer’s Nite” in 1979 to celebrate 60 years as an ARRL affiliated club, Carl’s was the caterer chosen for the food (at the Pabst Blue Ribbon Hall, at the site of the now former brewery).
- The American Red Cross put in an urgent request to ARRL to recruit 50 experienced hams for deployment to Puerto Rico in the aftermath of Hurricane Maria which destroyed the infrastructure of the island, leaving over 90% without power, running water, or even cell phone service.
- The company SpaceX made history by launching a recycled (used for a previous flight) rocket powering a recycled capsule (also used previously) with supplies for the International Space Station. The rocket was launched with a 6 month turn-around from its last use. This mission was a first for any NASA mission (using a recycled rocket and capsule).
- The HAARP (High Frequency Active Auroral Research Program) array in Alaska while running an experiment to try to produce an “Aurora” (man made aurora) had some slow scan TV images embedded into the signal. Hams as far away as Pueblo, Colo., and Victoria, British Columbia, Canada reported receiving the images.
- Stanley Black & Decker purchase the rights to the Craftsman name for all products not sold in Sears Stores. Stanley had previously purchased the Waterloo Company which was the supplier of tool chests and rolling cabinets sold under the Craftsman name.
- 7 “Earth-Like” planets are discovered orbiting a dwarf star Trappist-1.
- The Cassini spacecraft which had been studying Saturn from orbit, was sent into the atmosphere and eventual destruction as the final stage of its mission.
- Radio Shack files for Chapter 11 bankruptcy for the second time in 2 years and closes all remaining stores (after a major sale of remaining merchandise).
- International Crystal announces it’s going out of business at the end of May.
- Milwaukee Map Service closes its store (April 1) after 80 years in business.

- Daly's Pen Shop closes for good after leaving downtown Milwaukee earlier. They will continue on the internet as a buyer and seller of vintage pens and supplies.
- Joy Global (the company formerly known as Harnischfeger) having been purchased by Komatsu changes its name to Komatsu Mining Corp, making official another local company being bought by an out of state (or out of country) company.
- Clyde Stubblefield passed away in Madison, WI at the age of 73. Clyde was the drummer for James Brown during the period of 1965-1970. His playing is widely sampled in Rap and R&B music. After playing with James Brown, Clyde settled in Madison, WI and was active in the local music scene.
- Milwaukee born Jazz vocalist Al Jarreau, recipient of 7 Grammy awards, passes away at the age of 76, Feb 8, two days after announcing he was retiring from touring (he had cancelled tour dates set for the remainder of the year).
- There are 748,136 licensed amateurs in the US at the close of the year.

## 2018

- MRAC/100 special event operations during 2017 resulted in at least 209 contacts (probably more as the rest of the logs come in).
- At the 2018 MRAC / MAARS hamfest, the grand prize was won by Fred Schwierske a new ham who had just taken his test 1 week earlier (not with MRAC VEC otherwise he would have had his call by the fest). The prize was a Yaesu FT-3600 2M FM and C4FM (Fusion) radio. The hamfest preliminary results were 220 ticket sales and a per club profit of \$484.25.
- Due to Redemption Lutheran Church (MRAC meeting location) needing the basement for "Holy Thursday" (the day of the MRAC March meeting), the meeting location was changed to the classroom / meeting room at the HRO store.
- MRAC purchases a used Cushcraft A3 beam to replace the one the club sold a few years back (the purchase of a smaller beam didn't work out).
- MRAC (actually Barry Sprifke W9BLS and his vintage Sherriff's car) were invited to participate in the first ever "Fire, Police, EMT Expo" taking place at MATC South Campus (in the exact location where MRAC has been holding Field Day the last few years). Barry was invited to show his car and when invited said "I have this communications trailer" at which point they said bring that too. After the event, organizers invited MRAC to return next year and to operate a special event station during the event.
- The company SpaceX successfully launched "Falcon Heavy", the most powerful of currently operational rockets utilizing 3 booster rockets which when ejected were to return to a soft landing on earth. Two of the rockets returned to Cape Kenedy as planned (about 10 minutes after launch) but the third which was to have landed on a drone ship in the Atlantic Ocean had crashed. The two rockets which returned to the Cape, landed vertically, as if they just reversed their course. The one rocket which crashed, actually only missed the drone ship by about 100 yards. Two of the rockets have been used in past SpaceX launches, something no other company (or government has yet to achieve). Also of note, the rockets sent into space a Tesla automobile complete with a space suited dummy to "ride" through space! The car also contained a copy of the book "*Hitchhiker's Guide to the Galaxy*" and the car stereo playing "*Space Oddity*" by David Bowie.
- Art Bell W6OBB long a host of a nationally syndicated (broadcast) radio show dealing with paranormal activity, conspiracy theories and occasional amateur radio topics passes away at his home in Nevada at the age of 72.
- Pressley Jones N8UG owner of "The Wireman" cable and wire dealer passes away at the age of 89.
- Shure Brothers of Chicago announces that after 93 years they will exit the consumer audio phono (cartridge) business by the end of summer (the company continues in the pro audio market).
- The Yerkes Observatory in Williams Bay, Wisconsin is closed by the University of Chicago after no takers were found to take over the operation of the observatory.

- After having to play a tie-breaker game (making the season 163 games), the Milwaukee Brewers baseball team defeat the Chicago Cubs to become the National League Central Division Champions. The Brewers then defeat the Colorado Rockies in 3 consecutive games to advance to the National League Championships against the Los Angeles Dodgers. The Brewers would lose the series 4 games to three with the final two games in Milwaukee (the first game 7 post season game since the Braves were in the World Series in 1958). The Dodgers went on to lose the World Series to the Boston Red Sox without having won a single game in the series.
- There were 755,430 licensed amateurs in the US at the end of the year.

## 2019

- MRAC marks 100 years of affiliation with ARRL. The club affiliation program began with the first certificates awarded to 10 clubs in December of 1919. MRAC was one of those first clubs. In 1970 MRAC was informed that the other clubs from that first batch of club affiliations, only MRAC was still operating. See the story elsewhere in this book.
- The January MRAC meeting is cancelled due to weather concerns. Milwaukee was just coming out of 3 days of record cold weather and wind chills which resulted on multiple days of school and other closings.
- At the MRAC / MAARS hamfest this year there was a new prize donor, ABR Industries, a coax distributor and coax assembly manufacturer out of Texas donated 2 of their RG8X jumper assemblies. The grand prize was once again a 2M Yaesu Fusion radio (FT3600) which was won by club member Mark Tellier AB9CD.
- The April 6 meeting of the ARISS project group saw the first real test of the radio-antenna-computer system by taking all the equipment outside to try to receive a scheduled ISS contact with a Canadian school. The entire contact / pass was successfully received! Now on to getting the system to transmit properly.
- The April MRAC meeting takes place at the HRO store and is a demonstration of the satellite / ARISS antenna and radio system so far.
- Field Day at MATC South Campus in the Fire Training area saw the first use of the new 6 story burn building addition. If using the penthouse roof antennas can now reach almost 100 feet!
- MRAC once again participated in the MATC Fire / Police / EMT Expo in September. Barry Sprifke W9BLS besides having his vintage L.A. County Sheriff's car on display also brought his communications trailer where various people operated W9RH as a special event station for the event. Too bad the bands are not in better shape.
- For 2019 HRO Superfest is also an ARRL Central Division Convention with MRAC as a co-sponsor. This is to make sure ARRL sends one of the top people to help us celebrate 100 years of club affiliation.
- As part of the celebration of 100 years of ARRL affiliation, a banquet was planned for the Friday of Superfest / Division Convention. It will be at the Hilton Garden Inn located at Park Place (107<sup>th</sup> and Good Hope).
- To keep the ARRL affiliation anniversary banquet cost reasonable, donations from some manufacturers were solicited. Icom steps up donating an IC-7300 transceiver (approximately \$1100 value) which MRAC will raffle off. Raffle tickets will be \$10 for one or \$25 for three. Ticket sales will be limited to 250 tickets making for very reasonable odds of winning. The winning ticket will be drawn at the 100<sup>th</sup> Anniversary of ARRL affiliation banquet (winner need not be present to win).
- Owen Garriot W5LFL, the first ham to transmit from space (aboard the Space Shuttle in 1983) passes away at the age of 88.
- Canada becomes the second country in the world to legalize marijuana.
- After having effectively eliminated measles in the U.S. in 2000, a number of states are reporting epidemic levels of the disease.

# **The Beginning as Told By Someone Who Was There**

(2005)

Editor's note: The following is a reprint (with exact spelling and grammar) from a copy (dated October 1956 by Emil Felber W9RH) of a document entitled "*The Milwaukee Radio Amateurs' Club by L. S. Baird, Past President*". Other copies of this document have also been found proving it is authentic. The exact date of original publication is unknown though some documents point to sometime in 1923. L.S. Baird was one of the four founders of the club and the first president.

## **The Milwaukee Radio Amateurs' Club By L.S. Baird, Past President**

*The Milwaukee Radio Amateurs' Club was founded in January 1917, by L. S. Baird, A. C. Kletzsch Jr., J. B. Hitz, and Alonzo Pawling. In its prewar existence it could have been characterized as the junior amateur radio organization of the city. This existence being one of but a few months, all the early members were drawn from but a limited section of the city.*

*Previous to the founding of the Milwaukee Radio Amateurs' Club two of the local high schools had organized radio clubs, and one or two other attempts were made to found local wireless clubs, but with one exception none endured long. This exception was the Milwaukee Radio Association, which at the time of the founding of the Milwaukee Radio Amateurs' Club constituted the senior radio association of Milwaukee. This association did not survive the war period of government ban on amateur radio activities. Its post-war membership was absorbed by the Milwaukee Radio Amateurs' Club. Among these members were Robert Miregler, C. F. Bates, L. J. Prah, and L. A. Degner. The Milwaukee Boy Scout Radio Club was founded at about the same time, but existed for only a short period while its members were receiving instruction in elementary radio from a member of the faculty of the School Of Engineering. Some of its members joined the Milwaukee Radio Amateurs' Club.*

*In the spring of 1919 and shortly after the government ban on amateur radio activities was removed, a meeting of the Milwaukee Radio Amateurs' Club was held and plans were made for the coming club season of 1919-1920. A careful survey of the city was made and a list of all amateurs was compiled. This list was the nucleus of the complete record of all amateurs in the city that the club now keeps. The Trustees' Room of the Milwaukee Public Museum, which has a seating capacity of about one hundred, was secured as a hall for the Club to convene in.*

*At the first meetings in the fall of 1919 a new constitution was adopted and officers elected and installed. The officers were L. S. Baird, President; C. N. Crapo, Vice President; R. A. Teschan, Secretary; T. V. Weston, Treasurer; and R. A. Pelishek, Business Manager. Others prominent in the direction were: C. S. Polacheck, C. M. Prinslow, A. C. Kletzsch, Jr., and A. B. Lord.*

*The club became affiliated with the American Radio Relay League, Inc. and L. A. Degner, a member, was appointed City Manager. Many other events, both business and social, took place this year.*

*The club opened the season of 1920-1921 with L. S. Baird, Chairman of the Board of Directors; C. N. Crapo, President; A. B. Lord Vice President; Louis Heyman, Secretary; and E. W. Ruppenthal, Treasurer and Business Manager. Mr. Crapo succeeded Mr. Degner as City Manager for the American Radio Relay League, Inc. Meetings were held this season in a lecture room in the Old Insurance Bldg. obtained thru the courtesy of the School of*

*Engineering of Milwaukee. The Milwaukee membership of the now defunct Wisconsin Radio League, which had been founded by M. B. Grogan and R. F. Laidlaw, was absorbed by the club. Mr. Grogan became the Milwaukee Radio Amateurs' Club publicity manager. Before the organization of the Milwaukee Radio Executive Council, the Club became affiliated with the Chicago Executive Council (Radio). The "Chicago Plan" for control of radio traffic was adopted and enforced first by the Club and then by the Milwaukee Council. It was thru the efforts of the leaders of the Club that the Milwaukee Radio Executive Council was formed. This Club and several others are represented in the Council. The season was closed by a successful social and dance held in the dining room of the St. James Episcopal Church.*

*The season of 1921-1922 was opened with the following officers: L. S. Baird, Past President; C. N. Crapo, Chairman of the Board of Directors; D. J. Gellerupt President; H. F. Wareing, Vice President; L. W. Klingbiel, Secretary; and E. W. Ruppenthal, Treasurer and Business Manager.*

*The club meets weekly at 8:00 P.M. on Monday evenings, except the third Monday of each month, in the Trustee's Room of the Milwaukee Public Museum. Visitors and prospective members are welcome at all meetings. At meetings when outside speakers are not present, members present papers and informal discussions take place. Previous to the hour of opening the meeting, half an hour is devoted to code practice for those who desire it. Members are encouraged to present before meetings both radio traffic and technical problems. It is the hope of the direction of the club that in the near future a plan will be inaugurated whereby a certain period of the meetings will be devoted to giving instruction in elementary electricity and radio communication.*

*This year the club has embarked on an extensive lecture program. An attempt has been made to secure from the ranks of employees of Milwaukee's electrical industries a number of men who could lecture on some subject that has points in common with radio communication. Some of the lectures that have been given and some that remain to be given are: December 8, 1921, "The National Electrical Code and Its Application to Radio Signaling Apparatus", by A. C. Schultz, Electrical Inspector, Wisconsin Inspection Bureau; January 23, 1922, "Serving the Radio Amateur" by W. S. Wilder, Sc. B., E. E., Electrical Testing Division, The Milwaukee Electric Railway and Light Co.; February 13, 1922, "The Theory of the Electron Tube" by R. C. Siegel, Sc. B., The University of Wisconsin, 1921; February 27, 1922, "Some Possibilities in the Development of Electron Discharge Apparatus" by Arthur Simon, member I.R.E., Electrical Engineer, Cutler-Hammer Mfg. Co., March 13, 1922, "Storage Batteries" by J. P. Schroeter, Electrical Engineer, formerly Consulting Engineer, American School of Correspondence, Chicago, Ill. All radio men and other interested persons are invited to attend.*

*The club has several committees thru which much of its work is accomplished. Membership in one or more of these committees entitles the radio amateur to become actively engaged in the solution of the problems of local radio organizations. There is a Committee on Interference and Relay which has for its duty to cooperate with the A.R.R.L. City Manager in the solving of problems of local radio traffic. Some other committees, the work of which is obvious from their names, are the Committee on Papers and Publications, Program Committee, Publicity Committee, and the Committee on Research and Development. The work of the last-named committee is shortly to be transferred to a radio laboratory founded by several radio club members.*

*Membership appeals alike to the "DX" man, the radio experimenter, the beginner, and to those who have only a set for the reception of radio broadcasts. There are three classes*

*of membership viz: Member, Associate, and Junior. Dues for the first two classes are fifty cents a month and for Juniors, twenty-five cents. An initiation fee of one dollar is charged. The Direction of the Club is especially desirous of having for members all local members of the A. R. R. L., making the Club a real local section of the League.*

*There are several other radio clubs in Milwaukee and its suburbs, three of which are affiliated with this club thru the Milwaukee Radio Executive Council. They are as follows: Wauwatosa Radio Club, meeting on Monday evenings in the Wauwatosa High School; West Allis Radio Club, meeting on Friday evenings in the West Allis Public Library; South Side Radio Club of Milwaukee, meeting on Wednesday evenings in the South Side Branch of the Public Library. Although the Milwaukee Radio Amateurs' Club has a centrally located meeting hall and embraces a city-wide membership, its direction realizes the expediency of having additional radio clubs in the suburbs and various sections of the city. The Milwaukee metropolitan district is large enough and boasts a sufficient number of amateurs to make it a multi-club one. The Direction of this club does not view these contemporary clubs as competitors but as organizations striving with this Club to make Milwaukee's radio organization a success.*

*Milwaukee's radio traffic organization and traffic conditions will be discussed in another article under the heading of the Milwaukee Radio Executive Council.*

*The executive office to which all Club correspondence should be addressed is: 601 Enterprise Building, Second and Sycamore Streets, Milwaukee, Wisconsin.*

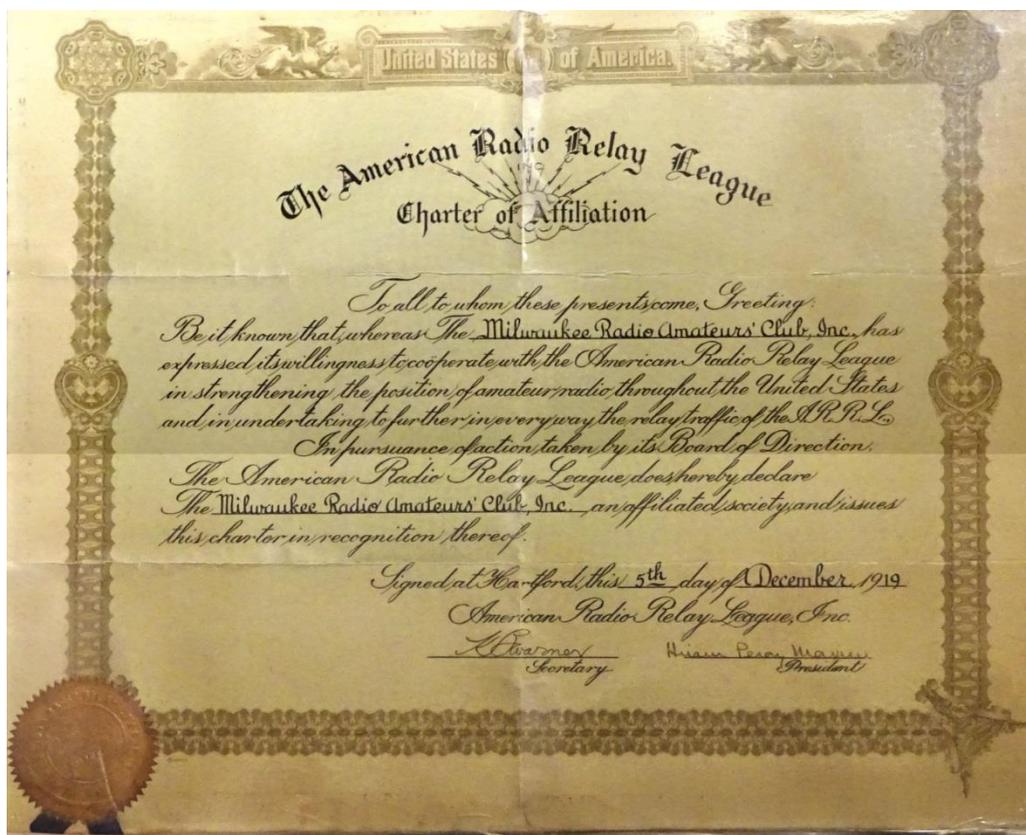
## ARRL Club Affiliation

(2019)

In 1919, after the reinstatement of amateur radio after World War I, ARRL decided to begin a program to formally affiliate with local radio clubs in an effort to ensure efficient handling of messages across the country. MRAC decided to jump in right away. An application was submitted October 24, 1919 and in December, 10 clubs became the first ARRL Affiliated radio clubs. MRAC became affiliated on December 5, 1919.

Quoting from the club's Prospectus as part of the membership application of 1920,

*In December, 1919, the Club became affiliated with and now constitutes the Milwaukee chapter or local section of the American Radio Relay League, Inc., executive headquarters, Hartford, Conn., which is a national non-commercial association of radio amateurs, bonded for the more effective relaying of friendly messages between their stations, for legislative protection, for orderly operating, and for the practical improvement of short-wave two-way radiotelegraphic communication. "Of, by and for the amateur," it numbers within its ranks practically every worth-while amateur in America and has a history of glorious achievement as the standard bearer in amateur affairs.*



Original certificate of affiliation with ARRL (unfortunately laminated by someone).  
This one specifies Milwaukee Radio Amateurs' Club Inc.



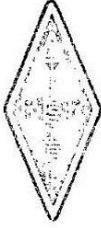
The club actually has two affiliation certificates. Upon close examination one is made out to the "Milwaukee Amateurs' Radio Club". It turns out that the club itself couldn't decide itself what their name was sometimes being the "Amateurs' Radio Club" and sometimes being the Radio Amateurs' Club". Things settled down about 1923 with the official articles of incorporation. Rest assured, both are the same club.

Also looking at the second photo, the certificate has folds in it (actually they both do, no idea why the first one does). It is this certificate that was "found" by ARRL in the 1970's stuffed in a file cabinet. It was officially presented to MRAC by Dick Baldwin W1RU, General Manager of ARRL at the MRAC Old Timers Nite/Christmas Party/Dinner in Celebration of 60 years of ARRL affiliation at Pabst Blue Ribbon Hall December 5, 1979. A plaque was also presented to MRAC by ARRL, the first of a number of plaques presented to the club by ARRL.

The other certificate, which is one usually on display at events, was laminated by someone who obviously was not thinking clearly, as it is forever laminated!

In January of 1970 MRAC received a letter from ARRL informing us that of the 10 initial clubs to affiliate with ARRL, MRAC was the only one still active. Now it is easier to find

someone or contact someone today (2019) than in 1970, but MRAC will take the honor this letter provides, making MRAC the oldest, longest affiliated radio club.



# THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

ROBERT W. DENTHISON  
W9DX, PRESIDENT  
WAYLAND M. GROVES  
W9NW, FIRST VICE PRES.  
ROEMER O. BLST  
W9QF, VICE PRES.  
P. L. ANDERSON, JR.  
W1NWJ, VICE PRES.  
DAVID H. HOUGHTON  
TREASURER  
JOHN HUNTOON  
W1LVQ, SEC. & GEN. MGR.

 OFFICIAL ORGAN

January 28, 1970

Milwaukee Radio Amateurs' Club, Inc.,  
J. Travis Baird, W9VQD, Pres.  
6815 North Ironwood Lane  
Milwaukee, Wisconsin 53217

Dear OMs:

Recently when the South Jersey Radio Assn. advised us it was planning to celebrate its fiftieth anniversary of affiliation with ARRL, we had occasion to consult our records. They show that of the ten clubs initially affiliated with ARRL in Dec., 1919, the MRAC is the only one still active, with an affiliation date of Dec. 5, 1919. Your original charter is in our file. SJRA appears to be next in line, with an affiliation date of Apr. 9, 1920, and the MIT Radio Society of Cambridge, Mass., close behind at Apr. 14, 1920. Thirty-four other clubs affiliated up to that time all appear now to be inactive or disbanded, if our records are correct.

We think it would be appropriate to mention these anniversaries in QST, and wonder if it would be possible for you to send us a picture or two with suitable caption material. We visualize perhaps a shot of the current officers, oldest and youngest hams now in the club, any old timers who are still around and remember the early days of the club, or anything else you feel appropriate to the occasion. If we run this piece in the April issue, which would seem appropriate since two of the three clubs were affiliated that month, we should have this material not later than Feb. 15. Sorry if this rushes you, but this matter has only just come to our attention. 73.

*We are planning on taking pictures on the evening of Feb 12 at our regular club meeting night. we are particularly interested in the old timers being there. How about it, can you be there.*

*73  
Dick W9ZPD*

Sincerely,

*George Hart*  
George Hart, W1NJM  
Communications Manager

D10 AMATEUR

**HOW ABOUT LIST OF PAST PRESIDENTS.**

**Letter from ARRL about being oldest affiliated club.**

## A Brief History of MRAC Bylaws

Jim Tromblay (1995)  
(Revised where noted Dave DeFebo December 2005-2011)  
(2019)

*Jim Tromblay, WB9LNU while he was secretary of the club and prior to some further by-laws revisions (1995), wrote the following to bring the board up to speed on bylaws changes.*

**3/8/23** – The first MRAC by-laws were approved

**10/17/33** – The first changes to the original by-laws.

Drop the requirement for an Associate or Junior member to be a member of the ARRL.  
Only Regular members must have a license and be a member of the ARRL.

**5/17/34** – Amendment change to Article 4 paragraph 2 and 3. The amendment changed the time of the year that elections would take place and on what days meetings would take place

**9/4/41** – Amendment change to the by-laws.

Change the location of the normal meeting place.

Change the supplied a member was required to have such as a copy of the Radio Communications Laws.

Changed the requirements to be a club member.

Changed the dues to 50 cents per week.

Drop the power of the club to control a persons operating times. This control over members was used because of the early spark transmitter interference problems.

The meeting of the board of directors could be held whenever they want based on mutual agreement instead of the club meeting hall.

**3/2/42** – Amendment change to the by-laws. 5 levels of membership were established along with a complete description of each level of membership.

Regular Member

Associate Member

Life Member

Honorary Member

Non-Resident Member

**6/11/46** – Add the club's first Trustee to the bylaws for the club station call W9HRM. That was Aldrich Krones, W9UIT. Each new President would become the new Trustee. This was later changed so one person would be Trustee until a change was deemed necessary by the Board of Directors.

**4/8/48** – Atty. Paul Leeb W9TKY and Emil Felber W9RH totally amended the bylaws to try and update them to match the times.

**3/29/51** – New Articles of Incorporation were written.

**12/16/54** – Amendment change to the bylaws. The first proxy vote was used.  
Change the regular meeting time from every Thursday to twice per month.  
The meetings shall be held on the first and third Thursday of each month.

**1965** – A highly condensed and simplified bylaws were written.

**1966-1970** – A complete reprint of the 1965 bylaws were included with the yearly club roster.

**1979-1980** – Very controversial bylaws were written (*including procedures for removal of a director – DBD*) causing dissention among the club and the board. Unusual wording changes and many mis-prints in the bylaws when they were published caused the controversy. The new bylaws were approved by a quorum vote but it appeared the members did not know exactly what they were voting for (based on information published in the Chatters of that time). A printing correction sheet was eventually sent out to all members.

**1983** – The 79-80 bylaws were changed to remove all the controversial items. Special attention was given to who has the right to vote and constitutes a quorum.

**1985** – In September of the year, the club receives a letter from the State of Wisconsin stating all old corporations are required to re-incorporate.

**1987** – New, restated Articles of Incorporation were made and the new bylaws were examined by Atty. Fennig. Quorum and proxy changes were made to be sure there could always be a vote (using what constitutes a quorum and allowing again, the use of proxy votes – DBD).

**1988-1989** – Members were sent copies of the 1987 bylaws with changes to Article 5 Section 2, dealing with the nominating committee.

**1995** – New simplified bylaws based on a study of club history, tensions and communications problems over the last decade were created (by a committee of Ken Eggert, W9MOT, Fred Linn, W9NZF, and Rodger Zaun, W9UVV). The highlight of the new bylaws was they were written in plain English.

#### ***Story additions by Dave DeFebo WB9BWP...***

**1995** - Besides the basic rewrite, the position of board chairman (made up of the immediate past President) was eliminated. The chairman was a non voting position (except in case of a tie).

**7/2001** – At a board meeting Dave DeFebo WB9BWP, proposed eliminating the position of 2<sup>nd</sup> VP. It seems we have a hard enough time getting people to run for office. This is one less position we have to worry about. Surprisingly no one objected. Jim Tromblay WB9LNU suggested we eliminate a director position in order to keep the board at an odd number of members (with changes, 9). The changes were presented to the club in September and approved. Copies were distributed at the following meetings.

**4/2004** – Bylaws converted to electronic format (from typewritten). In the process some wording was cleaned up (as is always the case) and the references to MRAC made consistent. New bylaws submitted for membership approval at the April meeting.

**8/2008** – Eliminate references to club being a Volunteer Examiner Coordinator (VEC) since

VEC is now spun off into a separate legal entity (see VEC story and history timeline). Submitted for membership approval at the August meeting (with an unusual amount of discussion taking place).

**1/2011** – Reinstate Student member classification this time with free dues. Change annual meeting for elections to April (so as to miss the May auction meeting crowds of visitors). Change to eliminate specific references to club activities like Field Day and Picnics. The biggest change was to return to the method of electing officers practiced prior to 1951 where only directors are elected and the actual officers come from those elected as director. Submitted for membership approval at the January meeting (with an unusual amount of discussion taking place and actual dissenting votes).

**From Dollars to Doughnuts**  
**(The MRAC Communications Van)**  
**Unknown – First appeared in July 1951 Hamateur Chatter**

*This piece could be captioned in many ways - "Out of little acorns, big oaks grow," would be an apt description. Or perhaps, "There's no substitute for work." Wise men through the ages have said countless things and historians have preserved the best for posterity. But the guy who coined the phrase, "From Dollars to Doughnuts," hit it right on the button when he gave us those few words to tell the story of the Milwaukee Radio Amateurs' Club mobile radio truck, W9HRM.*

*The Dollars part of the story, goes back to Jack Doyle, W9GPI, when he started the ball rolling and then put his shoulders behind the A.R.R.L. national convention staged here a few years ago. The club realized a tidy sum from the three day affair. Being a non-profit organization it was necessary that the M.R.A.C. take steps to put the money earned to the best possible use as soon as possible. Not being a frivolous group, after the first big affair at the Milwaukee Athletic Club, leading members and the board of directors hit upon the idea of a mobile radio truck owned, fitted out and operated by the club, and its members.*

*The ball was set in motion again. Arrangements were made to purchase a new international ton-and-a-half truck with a Metro van type, body. Radio gear was procured at the best possible prices with the help of Radio Parts Co., Amphenol, Motorola, and others. The Forrer Equipment Co. donated the operating chairs, for example.*

*A first class job of installation was the next step as the \$5000 "ball of-wax" took form. H. Charles Kaetel, W9SNK, a WISN engineer, and Gene Wille, W9EKU, a sound engineer, seized the opportunity to be of service and took charge of putting the equipment in operating shape. They were ably assisted by Clarence Burke, W9KEU, who handled the mechanical installation, and W9IDW, W9GLA, and W9LCD. The Gettelman Brewery electricians put in the AC wiring.*

*In a little more than a year we have come from the Dollars to the Doughnuts.*

*A newcomer to the club lists, Bob Posanaki, no call yet but a ham through and through, handled the doughnuts. It came about at the A.R. R.L. Field Day, just concluded. Travis Baird, W9VQD, and his crew of operators wheeled the completed W9HRM onto the field day location the Robert J. Kieckhefer estate in Brookfield and friend Posanaki wheeled in the doughnuts. Some thirty members participated in the exercises, and they all came away raving about the terrific job of gratis baked refreshments that Baker Posanski kept rolling from his Beloit Road emporium to the Brookfield headquarters. . .*

*Baird and his outfit using the truck rigs as a nucleus rang up 411 contacts in the 24 hour period. Most of the QSO'S were made on 40 meters, with ten meters showing up badly due to the condition of the band. Truck equipment used were the Collins and Harvey-Wells transmitters and the HRO and NC 57 receivers with RME 152A preselector. All power was supplied from the trailer two-and-a-half KW generator.*

*Following is a list of members who participated: W9SNK, W9ANA, W9CUW, W9DGB, W9DR, W9EKU, W9FDX, W9GIL, W9GLA, W9MOT, W9GPI, W9GZR, W9HDW, W9IDW, W9IRZ, W9IZO, W9IZQ, W9KEG, W9LFLK, W9NMA, W9LFP, W9LIC, W9LSK, W9SQL, W9UH, W9VLK, W9LIU, Baworth, Tom Herzog and Piechowski.*

*The truck carries two men in the front section and can seat four in the rear. It can be used in motion and carries two whip antennas as well as a collapsible antenna for use from a fixed location.*

# The MacArthur Parade

## Unknown – First appeared in July 1951 Hammateur Chatter

*Milwaukee mobile radio amateurs' added another laurel to their rapidly growing list of achievements during the mid-April visit of Gen. Douglas MacArthur to his home town.*

*After it was determined that the hams could be of assistance in transmitting information on the progress of the MacArthur motorcade, as it entered Wisconsin from the south on Highway 42, two mobile units were officially assigned to the parade itself. Along with relay stations set up en-route and the base station used to transmit bulletins to the agencies requesting pertinent information, the operation functioned with little interference and a minimum of difficulty. Under the direction of Charley Kaetel, W9SNK, the mobile group arranged to furnish information to the "MacArthur Network", a group of local stations (WEMP, WFOX, WISN, WMAW, WMIL), the Journal Radio Stations, WOKY, and the Journal and Sentinel newsrooms in addition to the Milwaukee Police department.*

*Control was established at W9AYX, just off highway 41, on 3873 kc and 3950 kc, with W9IZO, W9GPI and W9WK operating the mobiles, and W9VQD and W9NEM trouble shooting along the route in other mobile cars. The staff at W9AYX included W9IZH and W9VLK, in addition to W9SNK. All bulletins were relayed to the Shorewood emergency station, W9IH, and then telephoned downtown. The staff at W9IH included W9EBJ, W9AMB, W9DR and W9HWO. After the motorcade reached Milwaukee and started its whirlwind tour through the city during the afternoon the frequency shifted to ten meters and 29640 kc with W9EKU, W9MNI, W9MOT, W9UMX and W9RH participating as mobiles.*

*Jack Doyle, W9GPI, best describes the day's crowded activity in a story he has put down for posterity called, "The Daylight Ride of the Mobileers". Space in this issue does not permit a detailed account of the harrowing experiences Jack, Tommy Gettelman, Tommy Thomas and all the other faithfuls underwent. But his tale of the pushing, the shoving, and most of all the ...but... let him tell it... "As we moved into position behind the Governor's Cadillac, the big number ONE on his license became our target. Our speedometer suddenly was up to 55-60-70-whee 75 miles per hour and our driver froze solidly into the alert position of a person driving down a steep mountain grade his right foot pushing on the accelerator and his left one poised above the brake pedal.*

*"Within what seemed like seconds we plunged into the outskirts of Kenosha and people were everywhere including the roadway. Then Racine, the Milwaukee County line, the city and in less time than it takes to tell about it, we arrived at the Plankinton Hotel after the wildest drive of your reporter's career.*

*W9IOX and W9GIL attempted to get some snapshots and movies. We nearly lost two good hams in the mission. Gettelman needed a vacation to restore his shattered nerves, and Billy Sanger, our driver, wears an elastic bandage on his wrist after qualifying for the '500' race.*

*In the records the MacArthur motorcade can well go down in M.R.A.C. history as the 'Great Rat Race' and a revelation on amateur operations mobilewise at speeds and under conditions that NEVER again will be equaled. Nobody could get that nuts!"*

## **Emil Felber W9RH**

(2013)

(Editor's note – Emil Felber was a club member from 1924 until his death in 1967. During that time he served in various capacities of the club including President, other board and officer positions and was instrumental in the club's participation of the War Emergency Radio Service. He was also an ARRL Assistant Director for the Central Division. Shortly after his passing the club changed its call from W9HRM to W9RH. This was years before the vanity call sign program as most current hams know.)

### **Reprinted from February 1951 Hamateur Chatter**

W9RH–OLDFAITHFUL

*He's not the oldest oldtimer. 1923 isn't as far through the years as a lot of still active local amateurs can look back to.*

*He never had the highest power. Kilowatts came and kilowatts have gone, but he's had only a consistent middle-of-the-road wallop.*

*His station could hardly be called commercial. But his HRO was one of the first to grace receiving positions among Milwaukee amateur radio stations.*

*This fellow has never been an ARRL director, but through the years there have always been the regular line ARRL appointments up to SCM.*

*What then is his claim to fame. That's it! He isn't famous. But Emil R. Felber, W9RH, is consistent.*

*Now in his seventh term as MRAC treasurer, and in his fifteenth term as a MRAC Director, W9RH has been hamming in Milwaukee for 28 years. And in that 28 years his forte has been service; amateur radio as typified by the MRAC has received the bulk of his service.*

*W9RH was on the air before the first broadcasting station here. In the days when radio parts could be purchased only at Dewey's Sporting Goods Store and Waukesha was DX, W9RH and his spark coil used to badger for position with the handful of other local spark gap devotees on the band around 240 meters.*

*Later Emil spent "six-fifty" of his hard earned high school day money for an audio detector tube and heard a Detroit broadcasting station. He was really branching out.*

*Then, using his flat top and counterpoise he hooked stations in upstate New York, Ohio and all through the east on the old 200 meter band.*

*In 1925, W9RH experimented with radiophone in the most primitive of fashion. He loop modulated his final tank and with a telephone mike worked a couple of blocks over to W9LJU, Ray Peschek. Ray, a present day MRAC member, also, was then attending Boys' Tech while Emil was about to graduate from West Division. The story is told about W9IJU's*

*"slop jar" rectifiers freezing up regularly in his unheated bedroom "shack" rendering his station inoperative.*

*W9RH joined the club in 1924, and a decade later was elected president. It was during this period, too, that Emil Felber made a name for himself as a DX man, working such well known amateurs as Archduke Anton Hapsburg of Austria, among others. He twice led the state in the ARRL sweepstakes contest, and that at a time when it used to last for nine grueling days as against the present two weekends.*

*Emil gets the lion's share of credit for publishing the fine MRAC roster. In 1948 and again in 1951 he compiled the roster himself.*

*The United States Postal Department claims his daylight endeavor, and Emil Felber can be found almost any week-day trudging the west side streets, delivering the mail, but always ready to "knock off" and hash over the latest news or innovation in his hobby, amateur radio.*

*(This is another in a series of feature stories about MRAC members who have been active over a period of years on behalf of the club.)*

Editor's note: The list of all officers appearing later in this book was based on a list compiled by Emil Felber which was current right up until his death in 1967.

## Set Another Place for Sister Margaret

(2016)

(Ed note: While turning the pages of the March / April 2014 issue of CQ magazine the first sentence of the article with the above title caught my eye. I contacted the author and sent him a club archive DVD (he maintains regular contact with Tom W9VBQ), which brought back many memories of his time with the club. I made contact with him through his web site which provided the following info:

(The author's web site: <http://www.theodore-cohen-novels.com> )

*Theodore J. Cohen, PhD, holds three degrees in the physical sciences from the University of Wisconsin–Madison and has been an engineer and scientist for more than forty-five years. He has been an investor for more than fifty years and most recently, has focused on investigating and reporting on corruption in US financial institutions and agencies of the US government. His latest novel, Wheel of Fortune, brings back NYPD Homicide Detective Louis Martelli, the hero he introduced in Death by Wall Street: Rampage of the Bulls, who later reprised his role in House of Cards: Dead Men Tell No Tales, Lilith: Demon of the Night, Night Shadows, and Eighth Circle: A Special Place in Hell.*

*From December 1961 through early March 1962, Dr. Cohen participated in the 16th Chilean Expedition to the Antarctic. The US Board of Geographic Names in October, 1964, named the geographical feature Cohen Islands, located at 63° 18' S. latitude, 57° 53' W. longitude in the Cape Legoupil area, Antarctica, in his honor. Dr. Cohen's Antarctic Murders Trilogy describes what happened following a robbery of the Banco Central de Chile in Talcahuano in May, 1960. The robbery and the events that took place primarily between May 1960 and March 1962, are described in Frozen in Time: Murder at the Bottom of the World (Book I). Unfinished Business: Pursuit of an Antarctic Killer (Book II) reveals the events that unfolded between March 1962 and March 1965. End Game: Irrational Acts, Tragic Consequences (Book III) takes place in 1965 and resolves most, but not all, of the issues raised in the series.*

*Dr. Cohen's first novel, Full Circle: A Dream Denied, A Vision Fulfilled, which is based on his life as a violinist, was published in 2009. Dr. Cohen at one time was a violinist with the Bryn Athyn (PA) Orchestra and particularly enjoys the music of Gustav Mahler.*

*Finally, Dr. Cohen has published more than 400 papers, articles, columns, essays, and interviews, and is a co-author of The NEW Shortwave Propagation Handbook (from CQ Communications).*

*Dr. Cohen served in the US Army Corps of Engineers from March 1966 through March 1968, leaving the service with the rank of Captain.*

That should make it obvious Mr. Cohen is no ordinary club member (OK, former club member). Anyway, on to the CQ Magazine article.

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*Easter is on April 20th this year, right in the middle of Passover, which extends from the evening of April 7th through the 22nd. Thus, we thought it would be particularly appropriate this month to share this story from Ted Cohen, N4XX, on how ham radio became the common bond more than 60 years ago between a young Jewish boy, Ted, and a Roman Catholic priest.*

## Set Another Place for Sister Margaret

BY THEODORE J. COHEN,\* N4XX

According to Ken Eggert, W9MOT, then-president of the Milwaukee Radio Amateur Club, the call came from the Roman Catholic Archdiocese of Milwaukee, Wisconsin. "They need someone to act as a go-between for the Queen of Apostles Seminary in Madison and St. Anthony's in Milwaukee. Your contact in Madison, Ted, would be a priest... Father John Haas. His callsign is W9UJF."

It was easy to understand why the church might want such an arrangement. After all, the year was 1953. Those were the days when AT&T was the only long-distance telephone company in the U.S. Calls to distant places were extremely expensive. Even calls between Milwaukee and Madison, if placed on a frequent basis, produced high monthly bills. A free communication link to pass messages between parties in distant cities was something out of a dream!

I had received my Novice amateur radio license with the callsign WN9VZL just four months earlier in November 1952, so it came as a surprise that the club's president thought of me as the person to help.

"This requires someone who is available every weekday," he continued. "All you have to do is get on the air after school for about 10 minutes, copy any messages Father Haas has for St. Anthony's, send him whatever 'traffic' St. Anthony's has for the seminary, and that's it. I know you can do it. Waddaya think?"

"But I only can use code," I protested. At that time, Novices on the shortwave bands were limited to using Morse code (strictly speaking, the International Morse code). Plus, my receiving speed was 5 words per minute, just enough to pass the code

\*c/o Media-Tech, 122 Shady Brook Drive, Langhorne, PA 19047

*Ted is the author of seven novels, two of which involve amateur radio. These are Full Circle: A Dream Denied, A Vision Fulfilled, and Frozen in Time: Death at the Bottom of the World (Book I of the Antarctic Murders Trilogy). You can visit Ted at <[www.theodorecohenovels.com](http://www.theodorecohenovels.com)>.*



Photo A. The author at the controls of his amateur radio station in Milwaukee, WI, 60 years ago this month. (Photos courtesy of the author)

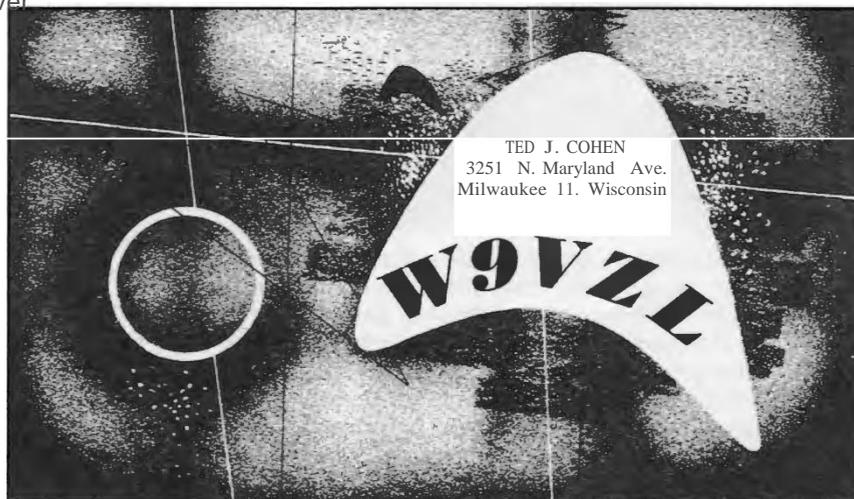


Photo B. This unique QSL designed by the author was based on what then was considered a mid-century modern style. QSO data were entered on the reverse using a rubber stamp to provide the template.

test required by the FCC at the time. "If I'm going to do this, Father Hass will have to use code as well. I hope he's a patient man."

Ken laughed. "I've already spoken to Father John. He's looking forward to working with you."

Thus began a friendship that extended throughout my high school years and beyond. Our on-air schedules, at 4:30 p.m. sharp, were conducted with military precision:

'WN9VZL de W9UJF Hi, Ted. Pis cl St A. Hv Sister Mary set place 4 Sister Margaret at dinner. She wl arve Milw 6 pm 2nite via Badger Bus. AR K"

'W9UJF de WN9VZL RR Nil frm St A. AR K"

'WN9VZL de W9UJF Tnx es 73AR SK"

"73 CL"

And with that farewell, we both closed our stations.

When school was not in session, we met Mondays, Wednesdays, and Fridays.

On it went for more than three years, two hams communicating, day in and day out, *without ever having met*. This was and still is the magic of ham radio. It mattered not that one was a Pallottine priest (visit <<http://www.pallottines.org/>> for more information) and the other a Jewish high school student. We were, simply, John and Ted. Our common bond was ham radio. Our "language" was the Morse code.

Then one Saturday afternoon in late winter 1956, the doorbell rang. Peering out, to my great surprise I saw a priest. He smiled and waved. Instantly I knew it must be John. Once inside, we sat in the living room eating cookies while hurrying to catch up on the previous three years of our lives.

Talk ranged from our daily contacts to our equipment and antennas, to the sunspot numbers and the improving radio conditions, and ... to the matzoh ball soup my mother was cooking for Passover.

"I love matzoh ball soup!" John proclaimed. "I can't get food like that in the seminary." Hearing that, my mother presented him with a bowl of hot soup and matzoh balls, forever cementing the relationship between the House of Cohen, Milwaukee, and Queen of Apostles Seminary, Madison. The look on Father John's face said it all, and only after he had a second helping did talk again tum to our first love-radio.

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## A Letter from the Founder

(2013)

Editor's note: The following is a letter from the MRAC founder Dr. L.S.H.Baird to J. Travis Baird (no relation, I think) dated December 19, 1961. A copy of the original letter is contained in the club electronic archives in PDF form

December 19, 1961

Dear Travis,

*What gives?*

*On a card just here from Crapo is a note, which. Sounds like "old rocking chair's got him", he says he isn't chairmaning the O. T. meet this year--told you he couldn't handle it.*

*I thought I had an equity in it this year. I've written around for a couple of years trying to locate the half dozen who started the Club in 1917, and I have been proposing to Crapo and Folly that this year they feature a "Founder's Night" with as many of the old boys on deck as possible.*

*Last year I had already dug up Art Faulkner, and he was there. Now I have located Oscar Miller--he's a banker in Miami, Fla., and any day now I still hope to discover the whereabouts of the last of the Pawlings, Al--an acquaintance of mine rents their big old shack up on 20th & Grand. I think Crapo has all addresses I turned up.*

*Then I thought olly would write the publicity, for he was in the old ARRL publicity dept. with me. I sent him a sample release, as enclosed. But I haven't heard from him lately, since right after he was going to see Junior Kletzch, one of us, he said.*

*I've got one foot in the grave myself, have had for twenty-five years. I can't come, much as I would like to. I was going to personally write all of the founding members, after I knew they had received their official invite, but it seems late now for that. I particularly wanted to write Hitz.*

*Or maybe you have entirely different plans. I have been away a long time; I may not know what's hep.*

*I believe I have it' on authority of my aunt that you gave up E.E. in favor of a manufacturing biz. Right?*

*Wareing was out here last Summer. Crapo was supposed to see me, too, but he says now, next year. There is always a chance, I see, we aren't going to wait for each other. Hi. I am not going to live as long as my aunt and my late ma.*

*I have rooted for it to all those I have written, Oscar, Jun'on et al. Folly knows 'em all, too, by their first names, and what you can get 'em up for to reminisce. I would surely like to see old C. M. Prinslow, my first wireless pal, who could tell about Gernsback's 10¢ detector he got stuck with.*

*Let me hear.*

73

ex-9HO

## **ARES and MRAC**

(2019)

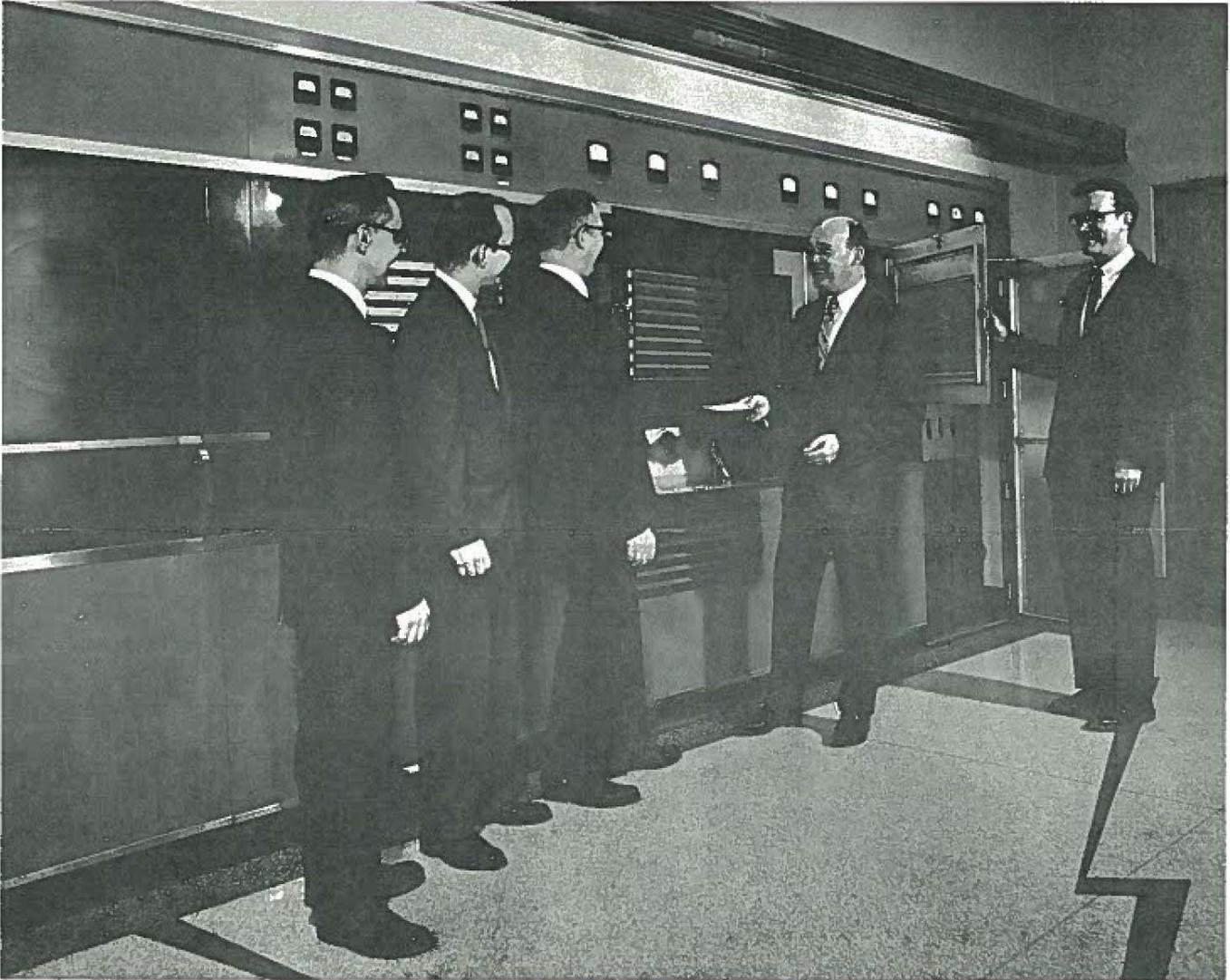
MRAC's involvement in formal public activities was going on since at least 1939 when MRAC provided operators for the Curtis-Wright Airport Air Races (Curtis-Wright Airport was the forerunner of Tinnerman Airport). World War II brought the War Emergency Radio Service, which locally was staffed with MRAC members using MRAC built equipment and MRAC club and member funds. As the ARRL formalized their public service communications structure, MRAC was deeply involved. All of the early Emergency Coordinators for Waukesha and Milwaukee Counties were MRAC members. Even some of the state Section Emergency Coordinators were MRAC members.

Membership in ARES involves no cost so if the group wants to own any equipment, especially repeaters, the money has to come from somewhere. Also any group equipment needs to be owned by some legal entity, not an individual. Well, in 1966 something happened which would help along accumulation of funds and a legal entity to own the equipment. WISN radio purchased a new AM transmitter, so their former main transmitter became their backup and they didn't need their old backup so they decided to donate the old transmitter to MRAC / AREC (at the time the Amateur Radio Emergency Service was called the Amateur Radio Emergency Corps).

The donation then prompted the creation of AREC Inc, the legal entity to own equipment and to accept donations and other monies. The initial board of directors of AREC Inc. were all MRAC members. Much of this activity was documented in MRAC Hamateur Chatter of the times. The following is text and pictures reprinted from Chatter articles as noted (hopefully more detail will be added in future years as more material is studied).

(The following pictures and text are from the June/July 1966 Hamateur Chatter pages 1, 2, 4).

## MORE ABOUT THE RCA TRANSMITTER



*The 5 KW Transmitter being presented by Mr. Schneider and Mr. Johnston of WISN.*

*This gift came as a complete surprise and as the picture on our front page indicates ... was quite a package!*

*We are deeply grateful to WISN, and hope that our public service effort can continue to generate such great appreciation. As we all know, our service is given willingly, with no reward or compensation expected.*

*But, everyone agrees that it's lovely (that is, nearly everyone)... the CREW that dismantled and moved it have other ideas- the weight was over 7,000 pounds!*

*It took one of Warren Zastrow's big **Allied Vans**, plus **Hydrocrane** and all the **Bull Power** that Stan Fadeske is capable of, **plus** many others to get the moving job completed.*

*From the moving PICS, it appears that an excellent supervisory job was done by Mcleland and Walt Glish.*

*After much deliberation, the decision to sell the unit was arrived at, and Bernie Tower, K9ZPP has been designated as agent ... to get the job done.*

*Bernie reports progress and has plans to merchandise the transmitter that should develop into a sale before too long.*

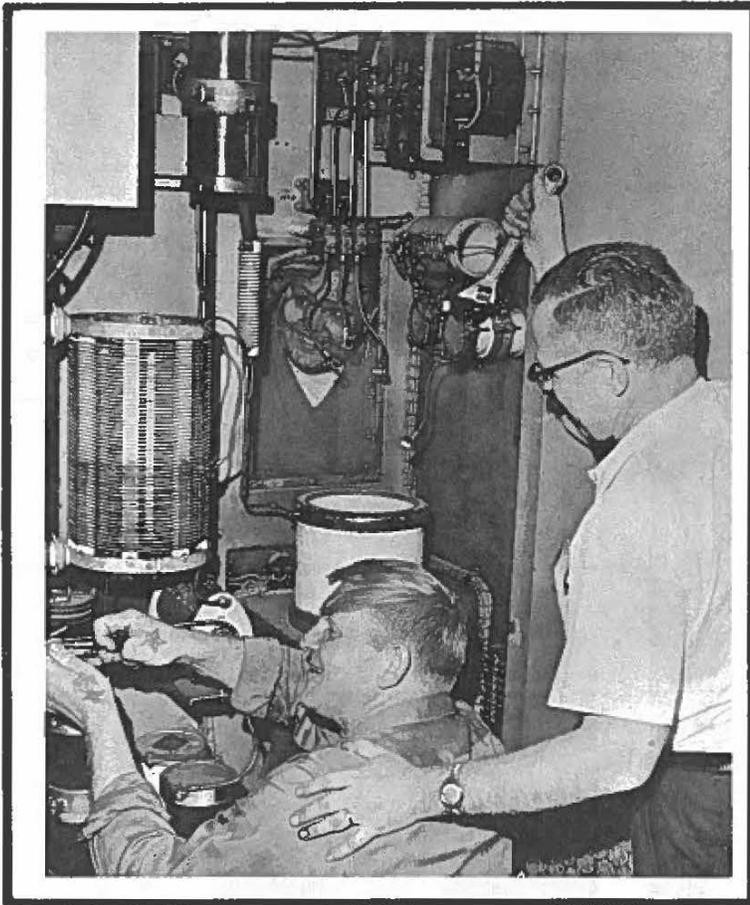
*Plans to utilize the funds received have been discussed - they will be earmarked to further expand the great local interest in Public Service ... More on this as things develop.*

*Mcleland now leaves his car in the driveway, since his two and a half car garage is full-up with an RCA Transmitter, all carefully stored and in perfect order.*

*To Warren and **Whalen's Movers** go our deepest thanks, and to the hard-working CREW, an "E" for Excellence.*



*NOTHING....But Nothing, escapes the eagle eye of Jack Mcleland, W9ATK, during the big move.*



*Walt Glisch directing operations, with Dick Kimball coming in from the rear. Looks like Stan Fadeske is still doing all the work.*



*I know the crystal is plugged in here someplace.*

(The following is from the August/September 1966 Hamateur Chatter page 1)

### **FROM THE EMERGENCY COORDINATOR**

*For several years we have been talking about forming a non-profit corporation under the laws of the State of Wisc, This would allow us to receive donations in the name of amateur radio as a public service. As you know the F.C.C. rules and regulations forbid amateurs accepting payment for their services. Under a corporate structure we could receive donations as long as they are held by a legal organization and used to enhance our public service activities. A case in point is the gift of a complete 5000 watt AM broadcast transmitter from WISN. We plan to sell the transmitter and use the proceeds to obtain additional equipment and supplies which will be held by the corporation and made available for all public service activities coordinated by the Amateur Radio Emergency Corps.*

*Our years of planning are now ending and a lawyer who is not an amateur has been retained to set up our corporation and to file the necessary papers with the State. There will be three requirements for membership in the new corporation: 1, must hold any class of valid amateur radio operators license; 2, be 21 years of age, or older; 3, be a member of the Amateur Radlo Emergency Corps branch of the Amateur Radio Public Service Corps as sponsored by the American Radio Relay League, Inc.*

*All AREC members will be asked to fill out an application form. This form will list the information needed for a permanent "ID" card which will be issued to all members. The "ID" card will carry a photo of the person to whom issued and will be numbered and sealed in plastic. This card will be registered with local police and law enforcement agencies in southeastern Wisconsin. Police and law enforcement officers will have the authority to confiscate the card if it is misused. Those AREC members who are not 21 will be issued an "ID" identical in nature, except the letters "INC." will be omitted. Both cards will have the same powers of identification.*

*Those amateurs and other interested persons who are not members of AREC will not be able to receive the "ID" card. The regular League AREC registration card will continue to be issued to all members. The sealed "ID" card must be turned in should a member's AREC resigtration not be renewed yearly.*

*It is the feeling of your SEC, EC, & Assistant EC's that the corporaioon will give strength to our amateur public service activities. The new name will be AMATEUR RADIO EMERGENCY CORPS INC. and will use the initials A.R.E.C. INC. The original officers and board of directors will be:*

*Pres. K9KJT Bob Goldstein  
Sect. W9NLY Frank Seboth  
Tres. W9ATK Jack McLeland  
Agent W9GPI Jack Doyle  
Board K9CMX Harold Engelke  
" WA9DHW Hank Arndt  
" K9JIX Don Evenson  
" W9YYW Walt Glish*

*Questions concerning the new set up were answered at the monthly AREC meeting Aug. 2. Additional opportunity to register in the corporation will be made during all Red Cross Committee meetings and at all regular AREC meetings. "ID" card photos will be taken at these times. If there are any questions, please feel free to contact any of the officers named above or inquire dufing the weekly AREC Net at 2100 hours local time on 146.670 wide-band FM.*

*Please keep in mind that the basic idea of the corporation is to accept, hold, & administer donations in the name of amateur radio. It will not restrict anyone's activities in any AREC approved service or function.*

Now just to muddy the waters, in the archives was found a letter which was never signed which proposed AREC merging back into MRAC (since MRAC originally provided the functions of AREC). An image of the letter exists in the MRAC digital archives. Unfortunately, when the letter was discovered, no one was around who could provide insight into the reasons behind it. Maybe some digging through minutes may reveal the story, but we don't know everything now. The letter is typed in upper case as it was printed on Teletype paper on a Teletype machine (they were mechanical machines back in the 1960s). Perhaps a mystery to be solved sometime in the future (almost sounds like a cliffhanger doesn't it)? Following is a copy of the letter:

APR 16 1964

APR 16 1964

THESE ARE THE TENTATIVE PROPOSALS FOR THE MERGING OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC. (MRAC) AND THE MILWAUKEE AMATEUR RADIO EMERGENCY CORPS (MAREC).....

1. THE CLUB NAME - MILWAUKEE RADIO AMATEURS' CLUB, INC. - TO REMAIN INTACT. UNDER THAT NAME WILL BE LISTED THE CORRECT NAME OF THE EMERGENCY CORPS.
2. THE MEMBERSHIP OF THE EMERGENCY CORPS SHALL BE ACCEPTED AS VOTING MEMBERS OF THE MRAC AUTOMATICALLY AND SHALL NOT BE SUBJECTED TO MEMBERSHIP DUES UNTIL SEPTEMBER 1, 1964.
3. THE PROPOSED BY-LAWS OF THE MRAC BE ADOPTED AS SOON AS POSSIBLE.
4. THE OFFICERS OF EACH GROUP SHALL HAVE DIVIDED RESPONSIBILITIES IN THE FORMATION STAGE. THE PRESIDENT OF MRAC TO OPEN THE MEETINGS, GET THE REPORTS OF ALL COMMITTEE CHAIRMEN, THEN TURN MEETING OVER TO THE CORPS CHAIRMAN FOR THE CONDUCT OF THE CORPS' BUSINESS. THE PRESIDENT WILL CLOSE THE MEETING. THE TREASURER OF THE CORPS WILL TURN OVER ALL MONIES TO THE MRAC TREASURER. THE SECRETARY OF THE MRAC WILL TAKE CARE OF ALL MAILINGS AND LETTERS AND THE SECRETARY OF THE CORPS WILL RECORD ALL MEETINGS. THE FIRST VICE PRESIDENT OF MRAC SHALL CONTINUE TO ARRANGE FOR PROGRAMS OF A LIMITED NATURE. THE FIRST VICE CHAIRMAN WILL MAINTAIN HIS NORMAL FUNCTION. THE MRAC WILL ADD TO THEIR BOARD OF DIRECTORS ON A PROTEMPORE BASIS THE CHAIRMAN AND THE TWO VICE CHAIRMEN AND THE SECRETARY OF THE CORPS WITH FULL VOTING RIGHTS. THE EMERGENCY CO-ORDINATOR SHALL ALSO BE A MEMBER OF THE BOARD OF DIRECTORS.
5. THE SUCCESSION TO THE PRESIDENT'S CHAIR SHALL BE ONLY ON ABSENTEE, CHAIRMAN OF THE CORPS, FIRST VICE PRESIDENT OF MRAC, FIRST VICE CHAIRMAN OF THE CORPS, SECOND VICE PRESIDENT OF MRAC.
6. MEETINGS AFTER APRIL 30, 1964 SHALL BE ON THE SECOND TUESDAY OF THE MONTH AT A PLACE DESIGNATED BY THE BOARD OF DIRECTORS INCLUDING THE PRO TEM MEMBERS AS LISTED IN PARA. 4 ABOVE.
7. THE ACTIVITIES OF EACH GROUP SHALL BE ACTIVITY OF THE COMPOSITE GROUP. NO PLANS NEED BE CHANGED AS THERE IS NO CONFLICT OF INTEREST.
8. THE NOMINATION COMMITTEE SHALL BE DIRECTED TO PICK PROSPECTIVE CANDIDATES FROM THE GROUP AS A WHOLE AND NOT CONSIDER THE APPLICANT'S LICENSE PENDING CONSTITUTION CHANGES FOR THE ANNUAL MEETING.

RESPECTFULLY SUBMITTED,

RICHARD H. OBERHOLTZER: W9ZPV

I PROPOSE THAT THE MEMBERSHIP OF MRAC TO ACT ON THE ACCEPTANCE OF THIS PROPOSAL AT THIS MEETING.....

APR 16 1964

# MRAC and Field Day

(2019)

In 1933 the American Radio Relay League (ARRL) established the annual operating event/contest Field Day. Field Day is a contest/operating event where the idea is to set up equipment outside of a traditional home based station and to make as many contacts with others in the United States and Canada. Besides the contest aspect, the event is supposed to help test our emergency preparedness (being able to set up and operate a station not in the comfortable confines of someone's home). MRAC has participated in every Field Day since the first. In this space we will attempt to gather information on club activity in Field Day over the years. As is often the case in this book, this is an early pass at gathering and listing information on Field Day over the years. As a result there is a lot of information currently lacking. Stay tuned for more info coming in future editions of the club history.

Some Field Day Statistics through the years:

**1941 – Empty field at the intersection of hwy 100 and Capitol Dr.**

Contacts – 291

**AND**

**43<sup>rd</sup> and Edgerton**

Operators – 20

Contacts – more than 300

**1942 – 42<sup>nd</sup> and Edgerton (W9ANA)?**

**1946 –**

Total Contest Score – 2536

**1947 – Ill Steel Co., E. Bay St. at Lake Michigan**

**1948 – Ill Steel Co., E. Bay St. at Lake Michigan**

Total Contest Score – 6412.5 (yes, 0.5)

**1951 – Robert J. Kieckhefer estate, Brookfield (Brookfield Rd & North Ave.)**

Operators/Visitors – 30

Category - 5A?

Contacts – 411

**1952 – Overlooking the lake, ½ mile north of Milw Cty line, Ozaukee Cty**

Operators/Visitors – 60

**1956 – Virmond Park**

Total Contest Score – 4626

**1961 – Lapham Peak, Delafield**

Operators – 14

Contacts – 668

Total Contest Score – 6237

**1978 – Nike Site, Lannon**

**1979 – Nike Site, Lannon**

**1980 – Nike Site, Lannon**

Operators/Visitors – 32

Category - 4A

Total Contest Score – ????

**1983 – Nike Site, Lannon**

Operators/Visitors – 23

Total Contest Score – 3313

**1984 – Nike Site, Lannon**

**1985 – Nike Site, Lannon**

**1986 – Nike Site, Lannon**

**1987 – Nike Site, Lannon**

**1988 – Nike Site, Lannon**

**1989 – Nike Site, Lannon**

**1990 – Nike Site, Lannon**

Operators/Visitors – 16

Category - 3A

Contacts – 391

Total Contest Score – 1544

**1993 – Indian Mounds Boy Scout Camp, Waukesha County**

**1994 – Pioneer Village, Ozaukee County**

**1995 – Pioneer Village, Ozaukee County**

**1996 – Pioneer Village, Ozaukee County**

Operators/Visitors – 41  
Total Contest Score – 1118

**1997 – Pioneer Village, Ozaukee County**

Operators/Visitors – 34  
Category - 4A Commercial  
Contacts – 241  
Total Contest Score – 1016

**1998 – Pioneer Village, Ozaukee County**

Operators/Visitors – 38  
Category - 4A Commercial  
Contacts – 465  
Total Contest Score – 1428

**1999 – Pioneer Village, Ozaukee County**

Operators/Visitors – 43  
Category - 3A Commercial  
CW Contacts – 40  
Phone Contacts – 522  
Total QSO Points – 1204  
Total Contest Score – 1404

**2000 – Pioneer Village, Ozaukee County**

Operators/Visitors – 25  
Category - 3A Commercial  
Contacts – 463  
Total Contest Score – 1506

**2001 – Pioneer Village, Ozaukee County**

Operators/Visitors – 47  
Category - 4A Commercial  
CW Contacts – 71  
Phone Contacts – 494  
Contacts – 565  
Including first club Field Day satellite contact!  
Total Contest Score – 1972

**2002 – Pioneer Village, Ozaukee County**

Operators/Visitors – 24 / 15  
Category - 4A Commercial  
CW Contacts – 23  
Digital Contacts – 24  
Total Contacts – 384  
Total Contest Score – 1462

**2003 – Pioneer Village, Ozaukee County**

Operators – 18  
Category - 5A Commercial  
Contacts – 341  
Total Contest Score – 1180

**2004 – Pioneer Village, Ozaukee County**

Operators/Visitors – 36  
Category - 5A Commercial  
Contacts – 515  
Total Contest Score – 1616

**2005 – Pioneer Village, Ozaukee County**

Operators – 15  
Category - 5A Commercial  
Contacts – 441  
Total Points – 1410

**2006 – Pioneer Village, Ozaukee County**

Operators/Visitors – 41  
Category - 4A Commercial  
Contacts – 313  
Total Contest Score – 1012

**2007 – Pioneer Village, Ozaukee County**

Operators – 27  
Category - 6A Commercial  
Contacts – 341  
Total Contest Score – 1888

**2008 – Pioneer Village, Ozaukee County**

Operators – 26  
Category - 6A Commercial  
CW Contacts – 162  
Digital Contacts – 123  
Phone Contacts – 500  
Total QSO Points – 1070  
Total Contest Score - 3098  
ARRL Sections Worked – 72 (missed Maine, Virgin Islands, Nevada, Wyoming, South Dakota, Northwest Territory, Manitoba, and Labrador/New Foundland)

**2009 – Pioneer Village, Ozaukee County**

Operators/Visitors – 12/14  
Category - 3A  
CW Contacts – 288  
Digital Contacts – 133  
Phone Contacts – 206  
Total QSO Points – 1048  
Total Contest Score – 3434

**2010 – Pioneer Village, Ozaukee County**

Operators – 3  
Category - 2A  
CW Contacts – 186  
Phone Contacts – 120  
Total QSO Points – 492  
Total Contest Score - 984

**2011 – Konkol Park, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS)

Operators – 14

Category - 2A

Digital Contacts - 1

Phone Contacts – 352

Total Contest Score - 1360

**2012 – Konkol Park, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS)

Loaner radio (Icom IC-9100) provided by

Amateur Electronic Supply

Operators/Visitors – 15/27

Category - 2A

CW Contacts - 10

Phone Contacts – 428

Total Contest Score - 1748

**2013 – Konkol Park, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS) and the

Gateway Technical College Radio Club

GOTA station using Gateway Tech Radio Club call – N9GTC

Loaner radio (Yaesu FTDX-1200) provided by

Amateur Electronic Supply

Operators/Visitors – 15/30

Category - 3A

Total Contacts – 622

Total Contest Score – 3000

**2014 – Konkol Park, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS) and the

Gateway Technical College Radio Club

GOTA station using Gateway Tech Radio Club call – N9GTC

Operators/Visitors – 15/40

Category - 4A

Total Contacts – 759

Total Contest Score - 3262

**2015 – Konkol Park, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS)

Loaner radio (Kenwood TS-590SG) provided by

Amateur Electronic Supply

Operators/Visitors – 20/60

Category - 3A

CW Contacts - 205

Phone Contacts – 411

Total Contest Score - 2392

**2016 – MATC South Campus, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS), and MATC

Radio Club

Loaner radio (Icom IC-7600) provided by

Amateur Electronic Supply

Operators/Visitors – 20/37

Category - 4A

Total Contacts – 384

Total ARRL Sections - 67

Total Contest Score - 2118

**2017 – MATC South Campus, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS), and Local

Emergency Field Radio Operators Group (LeFROG).

Operators/Visitors – 30/?

Category - 4A

CW Contacts - 293

Digital Contacts – 37

Phone Contacts – 265

Total Contacts – 595

Total ARRL Sections - 72

Total Contest Score - 2800

**2018 – MATC South Campus, Milwaukee County**

Operated in conjunction with Milwaukee Area Amateur Radio Society (MAARS)

Operators/Visitors – 30/?

Category - 4A

CW Contacts - 189

Digital Contacts – 23

Phone Contacts – 204

Total Contacts – 416

Total ARRL Sections -

Total Contest Score - 2306

## Field Day 1961

Art Vahovius, W9VSO, F.D. Chairman

(The following was published in the July 1961 Hamateur Chatter)  
(2017)

*This years MRAC "FIELD DAY" was held on June 24-25 at Lapham Peak, Delifield Wis. The followtng operators took their turn in pounding out point's tor the Club. Fred, W9DYG; Russ, W9RKP; John K9PSU; Russ, W9LVR; Don, W9KQD; John, K9MTM; .John, W9DGB; Gary, W9YGZ; Dick, K9GDF; Carl, W9ROM; Dick, K9CAN; Bob, W9ZB and Art; W9VSO.*

*The site itself would be an answer to any Ham's dream. The top of Lapham Peak towers 450 feet above the surroundirig area. Terrain from an almost flat acre knoll goes in one direction --- down hill. The signal strength that we pounded into all parts of the States and Canada, convinced me that the site does· make a difference.*

*The rigs\_ used were Rangers on 15, 20, 40 and 80 meters and a Gonset IV on 2 meters. The antennas used were as follows:*

*80 M inverted "V" with apex 110 feet up the FM tower.*

*40 M inverted "V" with apex 15 feet above the 70 ft. observation twr.*

*20, 15 & 10 m Telrex tri bander at 60 feet.*

*2 M 16 el Telrex Long Tom 10 fefet· above the 70 ft. observation twr.*

*The work started Friday noon, erecting tents: and setting up the equipment by the advance party which consisted of K9PSU, K9CAN and W9VSO. By 7:30 pm W9DYG, W9LVR, W9GDF, W9YZG, W9DGB and W9ROM joined the group, and in short order the tent was pitched, generator started, and the rigs fired up. The next day, (Sat.) several changes were made to antenns to solve loading problems.*

*Everything went along fine except for the generator which conked out (again) on Sunday morning and a fine time was had by all those who participated. A total of 668 contacts were made for a score of 6,237 points. Mighty fine meals were furnished by Mrs. Borchardt and Mrs. Bellanger and beleive me gals, if it was'nt good then how come there was'nt any left over?*

*The following people helped us out with ·gear:*

*Amateur Electronics--NC-300 Rev. & Gonset IV 2 meter Rcv.*

*A & F Electric --RME 4300 Rcv.*

*John Czarnecki, K9PSU-- Ranger Xmtr.*

*Art Vahovius, W9VSO -- Ranger Xmtr.*

*Ton Gettleman {Gettleman Brewery} -- A·huge new tent.*

*Carl Rohde, W9ROM--The site, and bldg with water and you know what.*

*I might be early in my optimism, but I believe the score racked up will be in the top contention. My sincere thanks to the participants for their 100 %· effort in making this Field Day one that will be in the records as one of the best.*

*NOW, here is the story of one of the funniest things that was observed during the gruelltng hours-of operation. Fred, W9DYG, was operattng, and there screwed down on the table was the "THING". That's a bug says I, after being informed that it was. Civil War vintage says I?? Question went unanswered, but then the "THING" went into action, and action it was. With a swing like a pendulum of grandpa's parlor clock, body english and a grim facial expression like his life depended on making a contact, a bobbing head with ye old corn cob pipe doing an up and down dance in cadence with the dots and dashes flying out, was just too much. My sides still ache. How tape-like CW can ever emanate out of a combination like that is way beyond me.*

*73, Art--W9VS*

## MRAC and License Classes and Training

(2017)

Over its entire history MRAC had done license training ranging from informal gatherings before club meetings to official multi-week classes.

The following article appeared in the September 1993 club newsletter. It described the series of classes which ran from September 1976 – November 1996.

*I promised Pancho I would write something about the license classes the club sponsors. I would have liked to have something ready before the current class session, but as usual I am late, but better late than never. I have also gotten carried away with writing this so the story will continue over several issues. If you do not want to see it hat much, then send in other news to displace this (a plug for Pancho). I will attempt to cover what we do, why we do it, and what we have done in the past. Unfortunately, there has not been a lot of record keeping done about our classes (actually Charlie Kaetel kept records which were never turned over to the club – Ed). Most of what I write is based on my memory. I may also editorialize on occasion, just a warning. First an intro and some history.*

*By the time you are reading this the fall '93 classes are in full swing (sign up now to be first on the list for spring 94). For he first time in about 3 years we will be trying to teach some code. Also for the first time in about 5 years we will maybe have a General class. Why have classes at all? In order to help insure the future of Amateur Radio, the ranks must grow. For many years the number of hams has been decreasing and the average (age) has been increasing. Within the last year that trend has stopped. Many people need the little extra push a class environment provides, not to mention the interaction with others learning as well as those more experienced.*

*MRAC has been conducting classes at least once per year since spring 1976. The classes officially carry the name of Charlie Kaetel - W9SNK who handled most of the organizational aspects of the classes from the beginning until his death a few years ago. At the beginning Dick Oberholtzer - W9ZPV was the instructor for the Novice class. Classes were held at Wauwatosa East High School. I have been involved since fall 1976 when I joined in to help Dick. Walt Glish - W9YYW also started out at the same time. Around 1977 MRAC then added a class for General/Technician (they were the same written test then) taught by Al Belanger-W9MDG. Walt moved over to work with Al, and I stayed with Dick. Around 1980 we added a class for Advanced/Extra (yes I class for the 2 grades). Al taught that one alone. Sometime in the mid '80's we split Advanced and Extra into 2 classes. Until the new Technician class came along we had a separate Novice class where we taught 1 hour of theory and 1 hour of code. Technician was lumped in with the General class. Today we have a Novice/Technician class with 2 hours of theory and no time for code. Before volunteer examining, Novice tests were given as part of the last class. Since the volunteer examining program, we send them all our business (Do you reafnze MRAC is a national Volunteer Examiner Coordinator all by ourselves, not affiliated with any other group?).*

*During the CB boom of the late seventies all (class) enrollment was high. We even had 2 Novice classes running at the same time. Advanced/Extra classes were full as no one ever offered such a class. As of about 5 years ago it seemed we had caught up with demand for Advanced and Extra classes as no one enrolled. Over the years, enrollment has varied from 2 to 60 per class. The age of people has varied from about 8 to 80+. Up until the last 5 years or so we had a 50%, success rate in the Novice class. Since that time and including the new Technician license, our success rate has increased to 75-100% (yes there have been classes*

*where all attending received a license). I can't find a good reason for that except the people have been more serious about ham radio.*

*MRAC has never gone an entire year without running at least one class. Other groups have had classes on and off over the years, but we have been at it continuously. The future became cloudy in 1989 when Wauwatosa decided to try ease their budget problems by increasing the fee we were paying for rooms by about 900%. Classes were then held for 1 year at my previous place of employment (the Research and Development Center of Marquette Electronics Inc.) who gave us the room for free as well as covering copying and mailing costs during that time (thanks MJC!). Since the fall of 1992 we have used a room at the Village at Manor Park, where Phil KB9FOQ is a resident and made arrangements for us to use the room.*

*We have always tried to have at least 2 instructors for the Novice and General classes. Some years classes were only held in the fall, but for most of the time, there have been both spring and fall classes. One year we even did summer. In a future segment I will try to list the instructors we have had over the years (but no guarantee I will have them all).*

*The one item which would be most interesting to know would be the total number of people who have been through the classes and how many were successful. Since fall of 1989 when I began keeping track, we have had over 120 people pass through classes (during that time most of those have been Novice or Technician with a few General, Advanced or Extra). I have not been able to keep up with how many got a license (as some take tests after class ends). Next time I will get into what we are now doing and make a pitch for more help.*

# The Story of MRAC VEC

(2009, 2017)

Dave DeFebo, WB9BWP with Tom Fuszard, KF9PU (with contributions from others as noted)

This article is an attempt to document the history of the MRAC and its involvement with volunteer amateur license testing. I am writing it due to my involvement in the beginnings of the official programs of MRAC first being a VE and then becoming a VEC. Some of the details may be missing at this, the first attempt at documenting the story. As always if you have additional information please let us know. The history of volunteer license testing is also covered to help show our place in that story. I was hoping to have the complete story up to the current time (2009) in this version of the history but events transpired to make that difficult. The main event was the action by the acting Treasurer at the time of removing the VEC funds from the club treasury and insisting the VEC handle its own money and accounting. This was in direct violation of the existing club by-laws of the time. The result was a lot of bad feelings, the VEC separating from the club (into a legal entity of its own), one new VE resigning his position and even one of the VEC management resigning his club membership over the handling of the situation.

First a little background on the VEC program,

The following is an email received by Tom Fuszard, KF9PU from Ray Adams, W4CPA, covering a brief history of the actual VEC program.

*From: WCARS VEC Inc.*

*To: Tom Fuszard*

*Cc: Win Guin W2GLJ*

*Date: Wednesday, July 26, 2000 8:09 PM*

*Subject: How the VEC program started*

*Good meeting you over the weekend, and I hope we benefitted all by the meeting. In any event, it seemed to go smoothly enough, at least no one came to fisticuffs!*

*Win tells me you want a thumbnail history of the VEC program for inclusion in a newsletter. The below is my off the cuff memory of the way it happened, most of which I am sure will stand the scrutiny of examination by more experienced individuals.*

*The Communications Act of 1033 was amended in 1983, at the FCC's urging to provide acceptability for the FCC to use "unpaid employees" for the administration of license examinations. There had been an opinion by an FCC attorney that the Novice license testing, as it had been handled for years by volunteer examiners of General of higher class licenses was in fact not legal, as the opinion held that the administration must be by an FCC employee.*

*The Amateur community breathed a sigh of relief, as it had been rumored that the Novice license test would have to be folded into the FCC's testing program, etc.*

***DID WE EVER HAVE A SURPRISE COMING!***

*By the time the ink was dry on the amended federal statute, the FCC announced that 1984 could be the final year in which they would administer ANY license tests for the Amateur Service, and that hereafter all such tests would be administered by volunteer examiners, already licensed, who would need to be screened and accredited by Volunteer*

*Examiner Coordinators that would need to meet acceptability by the FCC by signing a letter of agreement with them.*

*The first truly functioning VEC was, I believe, the Dayton Amateur Radio Association, who administered but a single session, at the 1984 Dayton Hamvention. The actual first VEC was here in Knoxville, but, upon finding there really was not any money to be made in the program, never tested a single session.*

*The American Radio Relay League [ARRL] held back on signing a letter of agreement unless and until there was a provision for the program to finance itself by charging a cost recovery fee from the applicant. In the meantime, Fred Maia W5YI, became the first "national" VEC followed by DeVry Electronics School of greater Chicago. An errata to the Communications Amendment did in fact make such a provision, and the ARRL became the third national VEC on [I believe] September 1, 1984.*

*Of the 39 VECs originally organized, many found there was more work than glory and soon surrendered their letter. Others, at the urging of the ARRL surrendered their letter and coordinated their testing through the ARRL. I'm sure some of the VECs had help from the FCC itself in surrendering their letters, as there were in fact a few rotten apples, as in any barrel.*

*Today we have 14 VECs remaining, and at the inception of electronic filing, I don't think there was any screening or qualification procedure used to determine that we were of the character that could be trusted to actually feed processable data in ASCII form into the FCC's computer for automatic issuance or upgrading of Amateur licenses. I don't consider that delegation lightly.*

*In the twelve years we had been working with them, I firmly believe they had already accepted all remaining VECs at face value. That causes a very relaxed atmosphere to prevail over the entire program today to the point that it has become the federal government's guiding light as to how to privatize a governmental function.*

*I take some pride in thinking I helped bring that accomplishment to reality.*

73

Ray W4CPA

OK, how and where did the MRAC fit in? The club discussed becoming involved with the volunteer examining program even before it began. After all, we had been conducting license class for a number of years and had been handling Novice testing (as that was a volunteer situation – not FCC conducted) so the VEC/VE thing would be the next step. At first we felt that becoming a full blown VEC would be a lot of work, and elected to work under an existing VEC. We chose DeVry Institute of Technology in Chicago, one of the first VECs to be established.

Sylvester Janczak, WD9JKZ stepped up to help manage the MRAC VE operations. Sylvester was to receive help from Harry Ciezski, KD9AJ and Ed Serruga, KE9JJ. As this was the early '80s, that meant Charlie Kaetel, W9SNK would also be involved (per his insistence-Ed.).

Charlie was extremely active in club business affairs (even holding the self-appointment as Business Manager). Charlie did a lot of work on club business. However, Charlie did have one major flaw, that things had to be done his way, whether anyone else agreed with that or not. This became a large stumbling point in MRAC operating as a VE under DeVry VEC and during the beginnings of MRAC as a VEC itself. Charlie did not like having to play by rules he did not set up (in this case FCC rules and DeVry rules) and this led to the breaking point with our

association with DeVry (specifically DeVry stating they would not consider room rental as a reimbursable cost) and almost costing us a couple of club members. After Charlie constantly complaining to the board about the “problems” working with DeVry, the board began considering the club’s relationship with DeVry. In an effort to make sure the board voted to cease operating with DeVry, Charlie began withholding receipts for testing expenses and then telling the board DeVry was refusing to reimburse us (unfortunately, we did not discover Charlie’s manipulating of the situation until sometime later). Based on the apparent un-cooperation between DeVry and the club, the board voted to end the relationship and the club was no longer a VE.

Charlie would also voice his displeasure with having people other than himself handling all the paperwork for the VE and then VEC operation. Charlie was an Advanced class ham. FCC rules specified that only Extra class hams could hold and administer Extra class exams. Again, this did not sit well with Charlie as it was not his rule. In fact at one point Charlie had his lawyer send a letter to the FCC accusing them of discrimination by not allowing an Advanced class ham (like Charlie) to handle Extra class examinations.

In 1983 there was limited discussion at a board meeting about the club becoming a VEC themselves (instead of working through any other VEC). In early 1984 (actually at the April board meeting), there was brief discussion of operating under the ARRL VEC but that was rejected. Charlie Kaetel then applied to the FCC for the club to become a VEC (on his own, without prior club approval). In the early days of the program, as was mentioned above there was not a lot of FCC scrutiny of VEC applicants, so our application was quickly approved. The board then voted to accept Charlie’s actions (at the November 1984 board meeting) and MRAC become a VEC. The board then moved quickly to appoint Jack Krause, W9JK to manage the VEC. Charlie liked Jack and went along with the appointment. Over time Jack needed help and Les Peterson, W9YCV joined in to help. Unfortunately the board never made it official with Les as assistant manager.

In the mid '90s, Jack Krause asked club President Ed Wille, W9PWG to find someone to take over as VEC manager. As was Ed’s custom, when someone asked Ed to find someone to help with some task, Ed wouldn’t really look for anyone but would take on the job himself. Of course that resulted in Ed taking on a tremendous amount of work as well as the club being vulnerable to having one person doing everything.

That vulnerability came to a head in January 1999 when Ed Wille passed away. We were forced to cancel the January and February test sessions. That concerned me. Fortunately, two members stepped forward to take on important roles in the VEC. John Kraak, KF9XL, who by his own admission was not much of a “computer guy,” said he could take care of basic administrative matters such as exam session planning. About the same time Tom Fuszard, KF9PU, approached me and said he’d be happy to take the filing duties. He couldn’t commit to assisting on Saturdays, he said, but would have time to do the filing. Putting these two guys together couldn’t have been more perfect. Finally, after about 14 years, a VEC committee.

So our VEC was back in business with the March session. John took over as session manager, and Tom--after a little trial and error--filed that first session successfully. He had to teach himself the process because Ed used a different method for filing the applications (computers were magic to Ed – one time he even took to printing out a long email exchange and driving to my house to deliver the printed emails – he could have just forwarded the emails!).

By the mid '90s the FCC started requiring VECs to file electronically. Most groups used e-mail to send their information. Ed struggled with this process a bit. His boat anchor of a computer--it had a B drive on it!--wasn’t set up for a regular e-mail program. If memory serves, the FCC used MCI Mail for e-mailing. The process for filing applications was long and laborious, mostly because Ed had to make sure there were no errors.

Fortunately Ed had saved a floppy he received from another VEC that contained data

entry software. The software was recorded on an A drive floppy, which Tom grabbed during a visit to Ed's house. There were no instructions with the program, but Tom managed to teach himself the process in a relatively short period of time. (A version of that software is still in use today - 2009).

In August 1999 the Universal Licensing System was incorporated into the amateur radio service. Under ULS, VECs had to start collecting Social Security Numbers. To help protect candidates' privacy, the application files (known as "batches") had to be encrypted. The most common form back then was PGP (for Pretty Good Privacy). It was available for free from a number of sources; Tom grabbed his copy off a Web site.

When an application was filed, the licensee would receive a unique identifying number which could be used in place of a Social Security Number for a future applications. (ULS was the forerunner to CORES, which generates the FCC Registration Number.) Years later the FCC revised its Web site to include a secure page for uploading the batch files. VECs no longer have to encrypt the files before sending.

During the year 2001, Mark Tellier, AB9CD started backing up Tom Fuszard with electronic filing when Tom was unavailable. So I officially made Mark a third member of the VEC management team (with John and Tom's permission, of course). Finally I asked John Kraak who would make a good backup to him, meaning the 2 major tasks, exam prep and planning and electronic filing and final paperwork handling would each have 2 people versed in those jobs. John suggested Tom Czaja, KG9EE. I confirmed with Tom that he would like and accept the appointment and then made it official. The VEC management was now at 4 and they could take care of themselves (During my time as President, John would report to the board almost every month on the activities of the VEC).

With a new VEC management team in place, they could once again consider attending the annual NCVEC conference in Gettysburg, Pa. Tom Fuszard started attending in 2000; he was accompanied by John Kraak in 2000 and 2001. In 2003 Tom was elected chairman of NCVEC, a position he held for five years. During his term Tom asked VEs to accompany him as official representative of MRAC VEC. Yours truly (WB9BWP) fulfilled the role for the 2005 conference; Ken Hahn, WK9H, did the honors in 2007. Tom is also a member of the Question Pool Committee, and he has invited Mark Tellier to join him for the 2009 conference as official representative of the VEC.

In 2006, John Kraak, KF9XL decided to step down as VEC manager. In one of my few successes as President during the time 1998-2002, having an official committee with recognized committee managers meant a change in VEC management did not disrupt normal VEC operations. In fact, most people did not even realize anything had happened. That was a big change from past operations when the coordinator/manager of some activity would leave and the operation would be in chaos. Larry Noldan, NZ9I was asked and accepted the offer to become the new 4<sup>th</sup> member of the VEC management team in 2008.

In March 2007 the VEC was incorporated as a separate entity. Known officially as MRAC VEC, Inc., the group continues to serve the needs of the amateur radio community throughout southeast Wisconsin. The VEC continues to hold 10 test sessions in the greater Milwaukee area, and many of its managers and VEs remain members of Milwaukee Radio Amateurs' Club, Inc. In fact, little has changed, save for the incorporation.

MRAC VEC continues the tradition started by Charlie Katel and Jack Krause in 1985. Its managers are proud to represent one of 14 VECs in the United States today, and look forward to serving the amateur radio community for many years to come.

# FM Simplex Contest

(2016)

In 2003 MRAC decided to create and sponsor a “sprint” style contest to generate FM simplex operation on the “normal” VHF and UHF bands (6M, 2M, 1-1/4M, 70CM). Sprint means the contest runs for only a short period of time. The contest was the idea of Sherm Swanson KB9Q who was the contest administrator for the first few years (see the officer lists for contest coordinators over the years). The idea was to generate interest and ability of operating simplex on the VHF bands. Many new Technician licenses buy an FM radio and jump on repeaters and never really experiment with what is all out there in amateur radio.

A number of award categories were created including mobile, HT (hand held), and club (individuals could designate their scores as also counting to a club total). A wooden plaque with engraved plates bearing the name of the club category winner for each year is kept on display at Amateur Electronic Supply.

A Sunday afternoon in February was chosen as the contest date. In following the sprint style of contesting, each band is used for 30 minutes (1 hour for 2M starting about 2007), so the entire contest lasts for only a couple of hours. That should work for non-contesters as well as seasoned contesters. Looking through the category winners over the years bears this out. Also, the exact rules have been tweaked over the years to reflect participant suggestions.

Interestingly, the club sponsored a VHF sprint style contest taking place on a Sunday in February in 1950! For that contest, only club members were eligible for an award and the contest was on a Sunday evening.

Just for information, starting in 2010, Dave Schank KA9WXN, who came in first place for 2008 and 2009 began operating a station for the club as W9RH which offered bonus points for contacting and was not a station to be included in the club score, leaving it up to the rest of the membership to pick up the slack. For the 2012 contest anyone contacting W9RH also received a 95<sup>th</sup> anniversary special event certificate.

Starting with the 2015 contest, there is a digital voice category covering Yaesu C4FM, D-Star, P25 and DMR modes. For a first try, an extra 30 minutes is added at the end of the contest time for all digital voice contact on any band. Is this the first integration of digital voice into an existing voice contest (not a stand-alone digital voice contest)?

Over the years of the contest, other areas of the country have adopted the contest for their area. So far, the east coast seems particularly interested.

Following is a list of all category winners over the years. There have been other areas running similar contests with many pretending it is an original idea of theirs and giving MRAC no credit. That’s OK, we know what we did (by the way, look up some 1950 and 51 club newsletters to read about their version of the same contest).

## 2003

1<sup>st</sup> Place Overall – Tom Schulte AB9EK  
2<sup>nd</sup> Place Overall – Patrick Moretti W9UQ  
HT 1<sup>st</sup> Place – Gary N9MGJ  
2M 1<sup>st</sup> Place – Jeff Annis K9VS  
70cm 1<sup>st</sup> Place – Warren Schall K9IZV  
6m 1<sup>st</sup> Place – Patrick Moretti W9UQ  
1.25M 1<sup>st</sup> Place – Tom Schulte AB9EK  
Club 1<sup>st</sup> Place – MRAC

SWL 1<sup>st</sup> Place – Mark Jahnke N9LBN  
Special Award – Mobile Operation - KB9WMJ

## 2004

1<sup>st</sup> Place Overall – Gary Barqholz N9UUR  
2<sup>nd</sup> Place Overall – Jack Huebschen N9XRO  
HT 1<sup>st</sup> Place – Gary Grant N9MGJ  
2M 1<sup>st</sup> Place – Jeff Annis K9VS tie  
2M 1<sup>st</sup> Place – Gary Barqholz N9UUR tie  
70cm 1<sup>st</sup> Place – Joe Schwarz N9UX  
6m 1<sup>st</sup> Place – Joe Schwarz N9UX  
1.25M 1<sup>st</sup> Place – Mark Tellier AB9CD tie  
1.25M 1<sup>st</sup> Place – Gary Barqholz N9UUR tie  
1.25M 1<sup>st</sup> Place – Jack Huebschen N9XRO  
Club 1<sup>st</sup> Place – MRAC  
Club 2<sup>nd</sup> Place – Badger Contesters

## 2005

1<sup>st</sup> Place Overall – Joe Schwarz N9UX  
2<sup>nd</sup> Place Overall – Ken Boston W9GA  
HT 1<sup>st</sup> Place – Joe Schwarz N9UX  
HT 2<sup>nd</sup> Place – Milan Levrich N9IDX  
2M 1<sup>st</sup> Place – Joe Schwarz N9UX tie  
2M 1<sup>st</sup> Place – Ken Boston W9GA tie  
70cm 1<sup>st</sup> Place – Joe Schwarz N9UX  
6m 1<sup>st</sup> Place – Jack Huebschen N9XRO tie  
6m 1<sup>st</sup> Place – Don Farrell KC9AYO tie  
1.25M 1<sup>st</sup> Place – Ken Boston W9GA  
1.25M 2<sup>nd</sup> Place – John Wilke K9RZZ  
Club 1<sup>st</sup> Place – Badger Contesters  
SWL 1<sup>st</sup> Place – David Hoffmann KC9GPJ

Club entries:

Badger Contesters – 9168  
Milwaukee Radio Amateurs' Club – 3564  
Milwaukee Repeater Club – 1737  
Ozaukee Radio Club - 767

## 2006

Base 1<sup>st</sup> Place – Ken Boston W9GA  
Mobile 1<sup>st</sup> Place – Warren Schall K9IZV  
HT 1<sup>st</sup> Place – Charles Grady KC9IIV  
2M 1<sup>st</sup> Place – Jeff Annis K9VS  
70cm 1<sup>st</sup> Place – Larry Noldan NZ9I (KC9IJA)  
6m 1<sup>st</sup> Place – Jack Huebschen N9XRO  
1.25M 1<sup>st</sup> Place – Warren Schall K9IZV  
Club 1<sup>st</sup> Place – Badger Contesters

## 2007

Base 1<sup>st</sup> Place – Ken Boston W9GA  
Mobile 1<sup>st</sup> Place – Larry Noldan NZ9I (KC9IJA)  
HT 1<sup>st</sup> Place – Kayla Waltemath KC9KPW  
2M 1<sup>st</sup> Place – John Wilke K9RZZ tie  
2M 1<sup>st</sup> Place – Jeff Annis K9VS tie  
2M 1<sup>st</sup> Place – Larry Noldan NZ9I (KC9IJA) tie  
70cm 1<sup>st</sup> Place – Ken Boston W9GA  
6m 1<sup>st</sup> Place – Ken Boston W9GA  
1.25M 1<sup>st</sup> Place – Ken Boston W9GA  
Club 1<sup>st</sup> Place – MRAC

## 2008

Base 1<sup>st</sup> Place – Dave Schank KA9WXN  
Mobile 1<sup>st</sup> Place – Mike Metroka WB8BZK  
HT 1<sup>st</sup> Place – John Kalenowsky K9JK  
HT 2<sup>nd</sup> Place – Gary Grant N9MGJ  
2M 1<sup>st</sup> Place – Mike Metroka WB8BZK  
2M 2<sup>nd</sup> Place – Joel Kluender W9JFK  
70cm 1<sup>st</sup> Place – Mike Metroka WB8BZK  
70cm 2<sup>nd</sup> Place – Dave Schank KA9WXN  
6m 1<sup>st</sup> Place – Mike Metroka WB8BZK tie  
6m 1<sup>st</sup> Place – John Kalenowsky K9JK tie  
6m 2<sup>nd</sup> Place – Joel Kluender W9JFK  
1.25M 1<sup>st</sup> Place – John Kalenowsky K9JK  
1.25M 2<sup>nd</sup> Place – Mike Metroka WB8BZK  
Special Award – Gordon Phoon KC2SRY (1<sup>st</sup>  
place 2<sup>nd</sup> call area)  
Club 1<sup>st</sup> Place – Badger Contesters

## 2009

Base 1<sup>st</sup> Place – Dave Schank KA9WXN  
Mobile 1<sup>st</sup> Place – Mike Metroka WB8BZK  
Mobile 2<sup>nd</sup> Place – Jerry Reidel KA9AJF  
HT 1<sup>st</sup> Place – KX9M  
2M 1<sup>st</sup> Place – Dave Schank KA9WXN  
70cm 1<sup>st</sup> Place – Dave Schank KA9WXN  
6m 1<sup>st</sup> Place – Dave Schank KA9WXN  
1.25M 1<sup>st</sup> Place – Mike Metroka WB8BZK  
Special Award – Gordon Phoon KC2SRY (1<sup>st</sup>  
place 2<sup>nd</sup> call area)  
Special Award – Maycee Campano N2KDK (1<sup>st</sup>  
Place HT 2<sup>nd</sup> call area)  
Club 1<sup>st</sup> Place – Badger Contesters

Club Entries:

Badger Contesters – 8993.5  
Milwaukee Radio Amateurs' Club – 7768.5  
Milwaukee Repeater Club – 1653  
Black Diamond Radio Group – 1318  
New Providence ARC (NY) – 153  
LOA Radio Club - 48

You may notice in the results for 2009 and 2010 there were certificates issued to New York area hams. The following email was received by the club in January 2010.

*From: Barry G. Cohen*

*Sent: Tuesday, January 19, 2010 10:20 AM*

*To: [4](#)*

*Cc: Paul F. Campano; Frank McAneny; Dave Barr; Bill Hudzik; Al Hanzl; Jim Stekas*

*Subject: FM Sprint Contest*

*To all MRAC Members*

*If "Imitation is the Sincerest Form of Flattery," then please accept this e-mail as a sincere commendation.*

*A couple of "Kid Members" of the New Providence (NJ) ARC (NPARC) have participated in your FM Sprint Contest during the last two years, and you have been so gracious as to issue them Certificates (first place in W2) for their activity. This year I have decided (imitation) to run a contest of our own modeled after yours. That way they will submit their logs to us and we will issue every entry a suitably inscribed certificate (more imitation). Indeed, I have also decided that plagiarism is a sincere form of flattery, but I do ask for your permission to circulate here in New York/New Jersey a slightly modified version of your Contest Rules.*

*We intend to hold our contest in tandem with yours, same time (GMT) same frequencies, essentially same rules. If conditions are good on 6 meters during that period we might even be able to contact W9RH and you might be able to hear N2XJ our Club Station. But even if that doesn't happen you can be assured that the seed you have planted, in order to make it easy for kids and new hams to get on the air, has taken root here on the east coast and will doubtless spread.*

*I'll appreciate an answer regarding the Contest Rules, and if anyone is interested I will be happy to send you copies of our Flyer and other materials including the certificate which has been commissioned from a professional graphic artist (club member).*

*73 es CUL de Barry K2JV*

*Dr. Barry G. Cohen*

*Berkeley Heights, NJ 07922*

*(Email addresses, addresses and telephone numbers removed)*

## 2010

Base 1<sup>st</sup> Place – Jeff Annis K9VS  
Mobile 1<sup>st</sup> Place – Mike Metroka WB8BZK  
HT 1<sup>st</sup> Place – John Kalenowsky K9JK  
2M 1<sup>st</sup> Place – Larry Noldan NZ9I  
70cm 1<sup>st</sup> Place – Mike Metroka WB8BZK  
6m 1<sup>st</sup> Place – Mike Metroka WB8BZK  
John Kalenowsky K9JK (Tie)  
1.25M 1<sup>st</sup> Place – Mike Metroka WB8BZK  
John Kalenowsky K9JK (Tie)  
Club 1<sup>st</sup> Place – Badger Contesters

### Club Entries:

Badger Contesters – 5010  
MRAC – 3786  
Milwaukee Repeater Club – 1350  
West Allis Radio Amateurs' Club – 1154  
Black Diamond Radio Group - 901

## 2011

Base 1<sup>st</sup> Place – Ken Boston W9GA  
Mobile 1<sup>st</sup> Place – Mike Metroka WB8BZK  
HT 1<sup>st</sup> Place – John Kalenowsky K9JK  
2M 1<sup>st</sup> Place – John Kalenowsky K9JK  
70cm 1<sup>st</sup> Place – John Kalenowsky K9JK  
6m 1<sup>st</sup> Place – Mike Metroka WB8BZK  
1.25M 1<sup>st</sup> Place – Mike Metroka WB8BZK  
Club 1<sup>st</sup> Place – Badger Contesters

## 2012

Base 1<sup>st</sup> Place – Ken Boston W9GA  
Mobile 1<sup>st</sup> Place – Warren Schall K9IZV  
HT 1<sup>st</sup> Place – Bill Pulvermacher KX9M  
2M 1<sup>st</sup> Place – Warren Schall K9IZV  
70cm 1<sup>st</sup> Place – Warren Schall K9IZV and Ken Boston W9GA (tie)  
6m 1<sup>st</sup> Place – Bill Pulvermacher KX9M  
1.25M 1<sup>st</sup> Place – Ken Boston W9GA  
Club 1<sup>st</sup> Place – MRAC

## 2013

Base 1<sup>st</sup> Place – Ken Boston W9GA  
Mobile 1<sup>st</sup> Place – Warren Schall K9IZV  
HT 1<sup>st</sup> Place – Bill Pulvermacher KX9M  
2M 1<sup>st</sup> Place – Warren Schall K9IZV  
70cm 1<sup>st</sup> Place – Ken Boston W9GA  
6m 1<sup>st</sup> Place – WB9TFH and Phil W9NAW (Tie)  
1.25M 1<sup>st</sup> Place – Ken Boston W9GA  
Club 1<sup>st</sup> Place – Badger Contesters

### Club Entries:

Badger Contesters – 2070  
Milwaukee Radio Amateurs' Club – 1283  
Black Diamond Radio Group – 1115  
West Allis Radio Amateurs Club – 1104  
Milwaukee Repeater Club – 910  
Miller Valley Radio Club – 186

## 2014

Base 1<sup>st</sup> Place – Al Maahs KC9IJJ  
Mobile 1<sup>st</sup> Place – Joe Schwarz N9UX  
HT 1<sup>st</sup> Place – none  
2M 1<sup>st</sup> Place – Tony KC9UDS  
70cm 1<sup>st</sup> Place – Jerry Reidel K9FI  
6m 1<sup>st</sup> Place – Jerry Reidel K9FI  
1.25M 1<sup>st</sup> Place – Al Maahs KC9IJJ  
Club 1<sup>st</sup> Place – Badger Contesters

## 2015

Base 1<sup>st</sup> Place – Al Maahs KC9IJJ  
Mobile 1<sup>st</sup> Place – Joe Schwarz N9UX  
HT 1<sup>st</sup> Place – none  
2M 1<sup>st</sup> Place – Tony KC9UDS  
70cm 1<sup>st</sup> Place – Jerry Reidel K9FI  
6m 1<sup>st</sup> Place – Jerry Reidel K9FI  
1.25M 1<sup>st</sup> Place – Al Maahs KC9IJJ  
Digital Voice – Barry Sprifke W9BLS  
Club 1<sup>st</sup> Place – Milwaukee Radio Amateurs Club

### Club Entries:

Milwaukee Radio Amateurs' Club – 5034  
Milwaukee Repeater Club – 269

## The W9RH Repeater

Dave DeFebo WB9BWP  
(approved by Dave Karr KA9FUR)  
(2019)

This is a long article covering the complete history of the MRAC repeater. Many of these details have only been known to a select few parties. Usually that was due to some sensitive negotiations and arrangements with the people supplying the sites or even some of the equipment. Now is a good time for people to know the real story to clear up some of the misconceptions about all that has gone into the repeater construction. The story is long because it covers over 12 years and a number of people and a bunch of equipment. Other than Jim Tromblay WB9LNU, I am the only other person who has been at least somewhat involved with this project since the beginning, so before the facts slip away...

Starting around 1991, the board of directors started talking about constructing a repeater. After all, for a club with the heritage we had, we should have been one of the first in the area to have a repeater, but alas, we were asleep at the time. At first the discussion was on getting a 220 MHz repeater as Novice licenses had access to 220 and not 2M and officially there were no 2M frequencies available. There was not a lot of equipment available for 220 but we were looking into that possibility. Ed Wille W9PWG, the club President at the time even bought a 220 MHz hand held for himself to experiment with the band.

In 1992 Ed Willie found a ham in Germantown, Bill Neuman WB9EFP, with a repeater for sale. Ed used \$750 of his own money to buy the system (and then some). The money got a late sixties vintage Motorola commercial repeater consisting of a receiver, transmitter, power amplifier, 4 Tx/Rx cavities, an ACC RC-85 repeater controller (vintage early 80's), Motorola rack cabinet, Hustler antenna as well as some non-functioning GE repeater parts and a smaller GE rack cabinet (the GE stuff was "free" but had to be taken with the Motorola repeater otherwise no deal). To everyone's confusion the sale also included the frequency of 147.045, which is the frequency the repeater was operating on at the time (from Bill's house in Germantown). I say confusion as repeater frequencies as coordinated by the Wisconsin Association of Repeaters are not transferable. In fact, if an existing repeater relocates more than a certain distance it is subject to frequency change/re-coordination. No one seemed to be paying attention and by the time someone said something it was agreed to let us go ahead as our signal was so weak we would pose no threat to any existing repeater.

The reason we did not have much of a signal was that Ed brought all the stuff home and with the help of Jim Tromblay WB9LNU installed the repeater in his (Ed's) garage and the antenna on his 50 foot tower. This was in the area of 79<sup>th</sup> and Lisbon Ave. Ed told the club what he did (he was President at the time) and asked if it was OK. That may sound kind of foolish and irresponsible but the deal had a time limit and had to be done when it was. There was no time to contact the membership or the board in advance. There was certainly no time to have numerous discussions about the plan. Everyone said "Good job Ed" and then pretty much left things up to Ed to run.

Of course Ed put his own money into the repeater so the club had to pay him back. While we did have money in the treasury, it was decided to try some sort of fundraiser to see how much we could get. Orv Stewart, KA9ONQ, came up with the idea of a personalized coffee mug. He knew a place that could screen on your name and call so we could take orders for and sell personalized mugs. Of course as is custom with the club when we try to have ID things made, the mugs are screened on the wrong side if you are holding the mug in your right hand (the lettering is then facing you). We recommended a \$25 minimum donation and received a

number of \$25, a few \$50 and even a couple of \$100 donations. We were able to pay back Ed Willie no problem. We had a working repeater.

The phrase working was relative. Over the next few years there was a lot of tinkering, a lot of money spent and while we did make progress it was very slight. More details later in the story.

OK, now we had a repeater, so what? In order to generate some activity, it was decided to add a 2 meter FM net to compliment the existing 10 meter net (which had been in operation since 1988). Since Ed Willie W9PWG had the idea and was going to be net control, the 2 meter net was scheduled to immediately follow the 10 meter net. At the time the 10 meter net was at 8:45 PM on Friday nights. Ed decided the 2 meter net would start at 9:15 PM or later depending on the activity on the 10 meter net. Of course many people were confused about a 9:15 start time so sometimes the net started early with someone else being net control or people would look for the net at 9:00, hear nothing and then go about their business and miss the net completely. Eventually, the 10 meter net was moved to 8:30 PM and the 2 meter net moved to 9:00 PM. Ed was very good at twisting arms. He would often call and prod people he knew well to get on the net. At other times the repeater saw very little use. Maybe it was just the club membership, but the fact that unless you lived within a couple of miles of the repeater you needed a good antenna and a fair amount of power to access it so it sort of made the point of a repeater kind of needless. In fact, when I would check into the Friday night nets I could usually hear almost everyone direct on the input frequency since they had to use good antennas and power. Ed was the only person who could really get in with a hand held, but that was because he was about 50 feet away from the tower.

To try to further boost repeater activity it was decided to have a contest with certificates awarded to the people who made the most contacts with other hams and club members on the repeater. The certificate would be awarded first to a person who contacted 5 other members on the repeater, not during the Friday night net. There would be endorsements for additional club members worked (in increments of 5). Only one certificate was ever issued, that one went to Byron Bye N9RTL. There were never any endorsements ever issued.

There were some technical issues with the repeater also. It was installed in Ed's detached garage. That meant in winter the cabinet was very cold and in summer it was very hot. Electronics do not generally like very hot. To compound things Ed's garage was very packed with stuff for Ed's business (it was a 2 car garage with room for barely 1 car). As a result the cavities (large tuned filters to allow 1 antenna to be used with a receiver and transmitter operating simultaneously) had to be placed horizontally on top of the repeater cabinet. Cavities for 2 meters are 6 inch diameter cylinders about 3 feet tall. Inside the cylinder are a number of sensitive mechanical parts. Mounted horizontally, the workings of a cavity can droop causing the adjustments to be incorrect. Couple this with the temperature extremes which also affect the metal parts (expanding and contracting) and we had a devil of a time keeping the cavities in tune. That plus Ed liked to tweak to try to make things better. As a result he eventually needed to send some of the cavities in to the manufacturer for factory adjustment.

All the problems with the cavities also lead to problems with the repeater transmitter desensing the receiver. Since the transmitter and receiver operate simultaneously, that was definitely a problem. In an effort to solve the problem we ended up buying another cavity (placing 3 on the receiver and 2 on the transmitter. Unfortunately after spending an additional \$300 that did not seem to help.

Along the way the few tubes used in the transmitter and amplifier started showing their age and required replacement (even more money). So far this repeater thing is costing a lot of money and time, but it is something we need to have to prove we are not just a bunch of old guys (wait, we are!). By this time Ed was spending a good deal of time in his garage tweaking

the repeater and then calling in Jim Tromblay WB9LNU (who worked with Ed) to help out (or maybe re-tweak after Ed was done).

We decided we should upgrade the repeater hardware. One way to do it was a piece at a time. First to go was the Motorola tube amplifier. So we purchase a Mirage 100 watt "repeater" amplifier. Repeater is in quotes because what Mirage did was take their normal 100 watt amp, remove the receive preamp and add a bigger heatsink. It sounds like we were not overly pleased. Well as with our other attempts it took a couple of years to figure out that we should not have spent the money. First, in order to use the amp we needed a power supply. Only the controller was 12V and that was powered by a small open frame power supply. We purchased a 50 amp Astron rack mount power supply to run the amp and the controller.

Ed was getting tired of all the tweaking (and Jim all the re-tweaking) and the board started discussing updating the equipment. It was decided to buy some brand spanking new repeater hardware and \$3000 was spent on an ICOM repeater. That should solve the desense problem and maybe even improve performance. Well...not quite. We were all fairly new at this repeater stuff so we trusted equipment to be designed and built as we needed. Looking back on things and knowing what we know now, the ICOM purchase was not a good one. In some instances it actually performed worse than the 25 year old Motorola equipment (a local ham had an ICOM UHF repeater and said of it, "The repeater works well. It does a good job holding my basement door open."). It turns out ICOM repeaters as sold in the ham markets at that time were not considered very good. But that could be another story. As a footnote to the ICOM purchase, the transmitter was rated at 25 watts, but the Mirage amp wanted an input of not more than 10 watts. Ed didn't know, realize, discover, whatever that the ICOM had an adjustable power output. It could have been turned down to 10 watts and the amp used, but he never did that and the amp sat in the rack collecting dust. The 50 amp power supply was now used to power the controller only (with about a 1 amp max drain).

OK, we have a new repeater receiver/transmitter but coverage is still not that great. Let's try a new antenna. Up to this point we were using the Hustler that came with the original repeater purchase. \$270 was spent on a Diamond dual band antenna (dual band being 2 meters and 70 cm). It was thought having 70 cm available would make a remote receiver possible. Again it turns out we were not totally correct. I have since had some experience with a couple of other repeater systems which used dual band ham antennas and in all cases their performance was not as good as with a single band commercial quality antenna. Oh well, we'll get this right yet.

Over the years there was discussions about getting a real site for the repeater. We didn't want to end up spending a lot of money on rent so were looking into free sites. Unfortunately we were never able to come up with anything.

In 1999 Ed Wille passed away. The repeater was still located in his garage and the antenna on his tower. While his daughter would be living at the house it was a good idea to go ahead and find a new home for the machine (and hopefully one with better coverage). A lot of talking and dreaming took place but no progress was made. Matt Planning KB9PRC was a relatively new ham (having been in the last Technician class in 1996) and a new officer in the club (Vice President). He also recently started a new job at Eaton Corp R&D on the north side of Milwaukee. I also worked at Eaton along with a number of other hams. One day Matt asked me what I thought the chances were of moving the repeater to the Eaton building. I said it couldn't hurt to ask. We recently got a new manager (Yolanda Holton) who was very receptive to amateur radio. In fact she was based in the Eaton R&D facility in Southfield Michigan which had an amateur radio club (W8ETN) with a dedicated office and their own equipment. With her blessing we talked to the building manager, a non-ham named Bob Chappie, and asked him if we could have some roof space. It turns out one of his reports was a ham. Nick Broncotti

KA9LUW, (later K9TNN) was the building electrician. He had been dropping hints to his boss (Mr. Chappie) about wanting some roof space too. After some discussion, Mr. Chappie asked what all this would cost him. We said there would be no cost to him. He said we were free to do whatever we wanted. He even said he would throw in a few hours of Nick's time to work on the install (Eaton required all employees to account for every minute of their workday). We all shook hands and proceeded to make plans and arraignments to get the repeater installed on top of the Eaton Corp. building at 4201 N. 27 St. The building is a 7 story office building with a 2 story elevator penthouse. The repeater would be located in the penthouse and we would try using 2 antennas, with the transmit antenna on the main roof (7 stories up) and the receive antenna on top of the elevator penthouse (slightly more than 9 stories up). Since our boss was pro ham radio and also wanted to foster a positive work environment (a relatively new concept at the company at the time), she volunteered to cover our time working on the machine as well as pay for the necessary feedlines (about \$1500 in hardline). In fact, plans were underway to form an Eaton ham club and we did get a license (W9ETN), but business conditions forced the elimination of a number of us from the company and that idea died away (that's another story not related to MRAC).

Jim Tromblay, WB9LNU, and John Merkl, WB9PSE, removed the repeater and antennas from Ed Wille's garage and tower and Jim loaded up a trailer and delivered the equipment to us at Eaton. We temporarily set up the machine in a 4th floor laboratory (including the antenna) and proceeded to learn the equipment especially the system controller. While the antenna was indoors, it was slightly higher than it was at Ed's house and the coverage was about the same (poor). So far Matt and I were doing the playing. We got Nick involved (being the building electrician he had easy access to the entire building) to scout out antenna locations and mounting possibilities. Nick enlisted the Eaton model shop to fabricate brackets for antenna mounting and we then made plans for a November antenna and repeater install.

Finally on Saturday, November 18, 2000 we moved the repeater hardware up to the elevator penthouse and installed the Hustler antenna (the original repeater antenna) as the transmit antenna on the main roof and the Diamond antenna on the elevator penthouse roof for a receive antenna. Getting all this equipment up there was not as easy as you may think. The building has two elevator penthouses, one for the freight elevator (which does go to the roof) and one for the passenger elevators (which go to the 7th floor, not the roof). The passenger elevator penthouse where the repeater hardware is going is a 2 story structure upon the roof. That means the rack and all RF equipment must be carried up a tall flight of concrete stairs and then up another flight of fairly steep and narrow metal grate stairs to get to its resting location. That meant all equipment had to be disconnected from each other and removed from the rack to be carried up. To get the receive antenna mounted on the roof of that penthouse meant climbing up a steel ladder mounted flush against one wall and crawling through a roof hatch. Do that with tools and a 17 foot antenna! That work was accomplished by Matt Planning KB9PRC and myself along with the assistance of 3 non-club members, Nick KA9LUW, Jim Hansen, W9AQN, and Mark Tellier who was not yet licensed (working on the repeater gave him the push he needed after wanting to become one of us since he was a teenager) but is now AB9CD. We were all Eaton employees and could get in the building at any time. That was why no other club members were involved. Actually a few more Eaton hams helped haul stuff up to the penthouse during the week previous so we could save time on Saturday. They were Keith Shilavy, KY9P, Joe Zuercher, KF9CB, Jean-Matthieu Stricker F5RCT (yes, in from France).

Eaton also provided the telephone line for repeater control. Actually the phone up in the elevator penthouse happened to be an old fashioned analog phone which was a direct line. It was not a digital phone going through the building PBX. So with the addition of an extra jack and some wire we had a control phone (the elevator penthouse phone saw use about once or

twice a year so we could easily share it without conflict) without anyone else knowing what we had done.

Anyway we now had a reasonable repeater installation. We actually had coverage beyond the city of Milwaukee and you didn't need a beam to get in. Dick McNew, WB9PTC brought his on-air code practice to the repeater after a number of years on simplex. That's how much better the system coverage was than before. We were on the Eaton building from Fall 2000 until Spring 2003. During that time we did try various experiments with antenna and equipment configurations (1 antenna, 2 antennas, different numbers of cavities, bandpass filter and more) to improve the system performance. What we finally discovered was a major flaw in the ICOM repeater. Due to something inherent in the design of the unit, if the input signal was not very strong, the repeater transmitter would overload the repeater receiver. This would happen within the repeater box itself, so no amount of external filtering could fix it. This did limit our coverage somewhat (but we were still ahead of what we had at Ed's house). We even tried to do some mods to the repeater box to see if we could at least minimize the problem, but after a number of tries, it appeared it would require too much work (almost a complete redesign of the ICOM packaging). This got us to thinking about maybe some new hardware - yet again.

During some of our experiments we began to question the effectiveness of the Diamond antenna. It was showing some signs of wear and may have taken a couple of lightning hits both at Ed's house and at Eaton. We mentioned our concerns and soon Jerry Wahlen, WA9CGE, produced a copper pipe J-Pole antenna which we put into service as a receive antenna (with Matt Planning single handedly removing the Diamond and mounting the J-Pole after a full day of normal work). Now before you laugh at a repeater using a J-Pole, let me say that while it may not have been the best repeater antenna, it was performing at least as good as the Diamond and maybe even a bit better.

Speaking of lightening, one day I received a telephone call from one of the other hams that worked in the building (Eaton) asking if the repeater was OK. He said he tried to bring it up on the way into work and couldn't. I grabbed my HT that I had with me and brought it up with no problem. We didn't have any wattmeter handy so I took a walk out of the building and through the parking lot west of the building. By the time I was about 100 feet away from the building, and with the repeater antenna in plain sight (still the Diamond at this time) I could no longer hear the repeater. This was not good. Matt, Mark and I made plans to go up to the penthouse the next day and check things out (and bring along some test equipment). The next day we went up there and hooked up a wattmeter and found the repeater putting out much less than 1 watt (the meter was not that good to give an exact number). Pull the ICOM out of the rack cabinet and haul it down to one of our labs where we could be more comfortable checking things out. We opened up the box and began to look around. One of the lab techs (not a ham) came by and asked what we were doing. We explained the situation to him and he peeked inside the box and pointed to a corner of the transmitter circuit board and asked, "Is that black spot and broken cap the problem?" It appeared we took a lightening hit from a storm that happened 3 days earlier. The hit blew a ceramic capacitor and a ¼ inch section of circuit board trace which led to the transmitter antenna output connector. We replaced the cap, added a wire to the board, gave the area a close inspection, applied power and made some measurements and everything seemed OK. Boy were we (the club) lucky!

On a Sunday in late 2001 during one of our experiments to improve the repeater operation (trying running the ICOM at low power and using the Mirage amp to bring the power output up), it was discovered that when the transmitter would key up it would generate a spur (actually the Mirage amplifier would generate the spur) that would start low in the band and move up the band. As it moved up the band it happened to frequently hit the frequency of 146.31 MHz. That is the input frequency for a very busy wide coverage repeater in town. This

was when we made contact with Dave Karr, KA9FUR. Dave was the frequency coordinator for the Wisconsin Association of Repeaters (WAR) as well as all around repeater technical guy. Dave drove around town with test equipment looking for the offending signal screwing up the 91 repeater and he found it at the Eaton building. Having found the problem, Dave returned home (to Waukesha) and ended up calling Mark Tellier. All this happened on a Sunday and by now it was around 6 pm. Mark said he would be happy to go to the repeater to get things fixed but Dave lives quite a distance away. Dave said we needed this thing fixed now so he would drive back in (having already been there an hour or so ago). Mark lives in Brown Deer and was only about 15 minutes away from the repeater but for Dave it was around 45 minutes. Anyway, Dave brought his test equipment and knowledge and he and Mark were at the repeater on Eaton's roof until 11 pm. Now the spur was gone (and the Mirage amp turned off) and we even got some free tweaking from Dave (who could just have told us to fix things or turn it all off). It turns out after talking to Jim Tromblay, we had some problems with the amp before. It seems the fancy repeater amplifier did not like the load presented to it by the necessary for repeater operation cavities (so much for it being a "repeater" amplifier) that caused the amplifier to go into oscillation. Oh well, we'll do without the amp.

While we did get the immediate problems fixed, this occasion was really the key to making contact with Dave Karr (who was not a club member and did not have to do anything for us but I did know him professionally from some past lives of both of us, plus he is an MSOE alumni as Mark Tellier AB9CD and myself are also) which would set the stage for all future upgrades and getting us a well functioning good coverage repeater. How did that happen? Well we somehow convinced Dave we really didn't know anything about all this repeater stuff (that was not too hard) and we were all really good guys in need of help (the in need of help part wasn't too hard either) so for some reason he decided to help us out. First, we asked him his opinion of our hardware. He told us what we already knew about the ICOM and recommended we replace it. But first, he recommended a new commercial antenna. When asked about the details, he said he often bought stuff from a particular supplier and he would order us one if we wanted. The board decided yes and we told him to go ahead and get us one. What he purchased was a Decibel Products 6 db gain antenna that was about 22 feet tall, weighed 32 pounds and cost about \$550. On April 21, 2002 in about 40-degree weather and freezing rain and 20+ mph wind we of course put up the new antenna. It's not the easiest thing to lift and keep vertical a 22-foot long pole that weighs 32 pounds especially in cold rain and wind but we somehow managed to do it. We now had a good antenna but we were not done yet.

The ICOM repeater was still a sore point with us and Dave. When asked his opinion of what to buy he recommended his current favorite, GE Mastr II repeaters. He said he would keep an eye out for one during an upcoming Dayton Hamvention trip. Well in May of 2002 at the Dayton hamfest, Dave was successful in finding a GE repeater he was happy with and purchased it for the club. That cost was about \$500. Not bad for a real commercial repeater (not a converted mobile radio). It was now May and Dave had not billed the club for the antenna he purchased previously that we installed in April and he just spent another \$500 for the club. Well he did eventually bill the club for the antenna and repeater but we essentially received a 6 plus month loan for no interest from him. Thanks Dave.

Toward the end of June the new repeater was installed but that was not all that happened. At the time of the new hardware install we also changed frequency. This was not significant just for changing our repeater frequency but for some additional good relationships we would build. It seems that the MATC repeater which was on 145.39 MHz was going to move to the new digital TV tower built for Channel 10/36. It would be higher than its present location on the channel 18/10/36 tower (a few hundred feet to the north of the new tower). That would give the repeater a larger coverage footprint than it had and would place it in potential

interference with a repeater in Illinois. At a MRAC board meeting early in 2002 Dave Karr asked if we would be willing to swap frequencies with MATC since 147.045 had a larger clearance zone into Illinois than 145.39. Just off the top of my head (I was President at the time) I said sure that would be no problem and what could we get in return. That surprised Dave and we just passed it off as a joke and proceeded to go along with the frequency change. With the installation and tune up of the new repeater hardware the frequency change would take place (and we would have to change the club banner and numerous printed material with the club logo on it – never, repeat, never design a logo with too much detail...).

Well the new repeater was installed and the ICOM repeater, Mirage amp, and Astron power supply were removed from the cabinet. I donated a small open frame power supply to again power the controller. With the new antenna and new repeater which did not suffer from internal overload we suddenly increased our coverage area. Something else happened with the new hardware and the adjustments by Dave Karr, we no longer had to play with the system, either to fix some problem or to improve operation. Wow! By the way the ICOM was listed on eBay by Mark Tellier and the club was able to recoup \$750 of our investment in it. It was sold to a ham in the southeast US – Dave Karr insisted it be sold to someone outside Wisconsin! The other items (antennas, power supply, and amplifier) all were auctioned off at the annual MRAC auction.

By this time only Matt Planning from the installation and maintenance crew was still employed by Eaton. The company was floating ideas about selling the building. We then decided we should start looking for a new home on our own schedule, before the building was sold and we would have to move things out with very short notice (during this time the 30<sup>th</sup> Street facility belonging to one of Eaton's divisions was sold, actually the entire division was sold – the interesting thing about that was the 30<sup>th</sup> St facility actually provided the heat for the 27<sup>th</sup> St building, but that's another story not radio related).

As before we were not really getting anywhere looking for a new home when Dave Karr called again. Since we seemed to be good guys and we did help him out with the frequency issue with no problems (as opposed to some other groups who have been approached over the years about changing frequencies), would we be interested in a new location which would be much better than our current location. Not wanting to sound totally stupid we said sure. We did not know details yet but were told to stand by. By the end of 2002 some details were starting to come out. There would be a group repeater/remote receiver site. It would involve 2 antennas for VHF and 2 for UHF. On VHF would be our repeater and a Navy MARS repeater and some remote receivers for other repeaters. On UHF would be additional area repeaters and remote receivers. As part of the deal we would provide our antenna as one of the VHF antennas. In return we would have a receive antenna at the 730 foot mark and a transmit antenna at 630 feet. The antennas are fed with 2-1/4 inch hardline. All equipment is housed in a concrete block room with its only entrance through a door from the outside. The location is the Channel 10/36/18 transmitter building. The tower is the Channel 18/10/36 analog TV tower. The receive antenna is slightly above the half way point of the tower. The top of the tower has the Channel 18 antenna and just below is a mounting arm with the channel 10 and 36 antennas. For the location we have to thank David Felland, WB0AFB, former Director of Engineering for WMVS/WMVT TV, Dave Karr, KA9FUR, Wisconsin Association of Repeaters Frequency Coordinator, Dave Schank, KA9WXN, engineer WMVS/WMVT TV (and MRAC member and current President). All antenna work was performed by Skywave Tower Service. For those who do not know, the location is Humboldt Ave just north of Capitol Drive bordering the Milwaukee River (really, the river is about 100 feet from the repeater room door and one of the tower guys actually goes over the river).

As of this writing we are approaching the 10 year mark of operation from this new site. In October of 2005 the controller was replaced with a state-of-the-art unit which allows programming by computer as well as digital voice playback (not recording as some mistakenly announce) for realistic and customizable messages. We are a long way from exercising the capabilities of this controller. The controller was produced by a company named S-Com based in Colorado. It turns out that the owner of S-Com, Bob Schmid, WA9FBO attended Milwaukee School Of Engineering from 1969-1973. During that time he was also an MRAC member! Also late 2005 saw the installation of a bank of 1200 AHr batteries so the entire site now has emergency power. That was thanks to Dave Karr (and no cost to us!). With all the new hardware there has only been two "service" calls necessary at the site. If we do need access, Dave Karr or Dave Schank need to be there, so extra thanks to them (and they also make sure things work well so they don't have to go there). Our coverage now extends from Sheboygan to the Illinois state line and west throughout Washington and Waukesha counties and southwest to just outside Delavan in Walworth County. All locations are for mobile radio coverage. Base stations can do better. When the band is open it is not unusual to have stations from north of Green Bay to access the repeater. We have even had people from Iowa use the machine. There are some holes in Waukesha County that only a second receiver could fix (hint). The repeater has also seen use as a secondary frequency for some city of Milwaukee public service events including two Miller Lite Rides for the Arts events as well as others. I can even hear it on an HT from my house in Muskego. Quite a change from when it was at Ed Wille's house when I had to use an outside antenna just to hear it and had to run at least 25 watts just to get in. We made a lot of mis-steps (mistakes?) and spent way more money than we needed to, and we certainly undertook the project about 20 years too late, but we got there. Thanks to all the people who helped us get there, many of them not even club members who could have told us to get lost. Be sure to thank them when you can and be sure to use the repeater, it took a lot of work to make it work.

What's new? Not much. Everything is working well. There was a small problem with an adjustment control in the summer of 2007 which resulted in some stations not being able to satisfy the PL needs of the machine – thus they could not reliably access the repeater. Within a few days, that was fixed. A new version of controller audio board software was loaded and the memory for the controller was upgraded in the fall of 2007. It helps that the developer of the audio board is the same person who put the system together (Mr. Dave Karr KA9FUR). Performance continues to be great. Now if only we had a secondary receive site in Waukesha County to cover some of the holes in coverage we have there...

During 2008 a DSL internet connection was added to the equipment room. Stay tuned to the repeater for some interesting new items hopefully sometime soon (could have been done earlier if the technical committee wasn't busy taking care of club business by being officers).

For the years since 2007-to 2014, there is nothing really to report. Everything is working, nothing has broken. There are a few items which we would like to implement, but due to other demands and the limited availability of the technical people, those items have not happened. While some of those ideas would be neat, everything currently works, so why mess it up. We are always open to suggestions.

In the spring of 2014 the club was approached to participate in the beta testing program for a new digital voice system produced by Yaesu. A handheld and a mobile radio have been available for the new mode, and a repeater is finally being released. Yaesu wanted an existing analog repeater system with a single site to try out the new repeater. A single site, existing system was desired so the new repeater could just drop in, replacing the existing analog repeater and results compared. The Yaesu repeater (opposed to other digital voice repeater

systems) can handle both analog and digital voice signals, using an automatic mode select feature. In the weeks prior to AES Superfest 2014, the repeater is installed. Everything looks good. In September, a new net for Yaesu digital voice users was started (Saturday evenings at 7 PM) to help people get accustomed to the new technology. In the spring of 2015, a newer, updated version of the repeater is made available and a special pricing promotion is in place (about 1/3 the normal retail price) for both new users and existing beta users. Application was made to Yaesu and we finally took delivery of the new system. We did get to keep the existing beta version hardware to experiment with. For the initial run of repeaters Yaesu also offered a batch of polo type shirts with the club name embroidered. The Milwaukee Area Digital Operators Group (MADOG) ordered a repeater with MRAC and there were to be 2 batches of shirts one for each group. Instead all the shirts came in one way, that of MADOG. Maybe we can shame Yaesu into giving us something.

In late 2017, Yaesu updated their repeater model to a DR-2X. This time a special price was offered and they would ship the repeater and within a set time, the old repeater (DR-1) would need to be returned. At the November 2017 club meeting, the upgrade (repeater along with the optional Ethernet board) was discussed and put to a vote along with the purchase of a Wires-X box and necessary dual band radio to implement the Wires function. The motion passed unanimously. In late 2018 WIRES is enabled on the repeater with a radio and Wires-X box from the home of Dave Schank KA9WXN.

## MRAC / MAARS Interclub Hamfest

Dave DeFebo  
(2019)

In 2010 Michael Harris KC9CMT the club Secretary (and newsletter editor, meeting room key holder, refreshment chairman, etc) suggested we do a hamfest to get club members to work together on a project. Saturday February 19, 2011 became the date for the first MRAC / MAARS Interclub Hamfest. Basically our advertising didn't start until the West Allis Hamfest on Jan 8, 2011. Flyers were handed to every seller at that hamfest. That means we did advertising for about 6 weeks. With that short period of time we still sold 35 advance tables. The final results were 40 tables and 220 tickets sold. That produced a net profit of approximately \$1000 divided between MRAC and MAARS.

For the 2012 hamfest we started advertising at the South Milwaukee Hamfest, July 9, 2011. Flyers were delivered to hamfests in Cedarburg, Belvidere II, St. Charles II, even St. Louis Mo. And once again we handed flyers out to all sellers at the West Allis Hamfest in January 2012. The result was 40 advance tables with another 10 sold at the door. A majority of sellers were from Illinois. Ticket sales came in at 300, up from 220 in 2011. The result was a net profit of approximately \$1600 to be divided between MRAC and MAARS. As a result of the good turnout, all those who helped out at the 'fest and stuck around to help clean up were treated to pizza and soda courtesy of the clubs. The successful hamfest also contributed to a free food joint meeting of MRAC and MAARS at the February MRAC meeting time and location.

2012 was also the debut of prizes. ARRL and Don Michalski W9IXG (Wisconsin Section Manager) provided some. The RF Adapter Guy (that is the business name) donated a dual band mobile antenna and N3FJP software donated a download version of their complete software logging suite (a \$40 value). Luckily, so far, both years have had fairly good weather. 2011 was very cold, but there was no snow on the ground. That is always a risk for anything in February.

2013 included prizes once again from RF Adapter Guy and N3FJP Software besides the ARRL gift certificates provided to all sanctioned hamfests. Oh yes, we also received about 20 tickets to the Shrine Circus the next weekend (which no one wanted). American Science and Surplus also had 2 tables. Final profit for each club was around \$650 (\$650 to each club for a total of \$1300 profit). The profit was down a bit as expenses crept up as we try to figure out what works.

For 2014 in addition to N3FJP Software, ARRL, and RF Adapter Guy providing prizes, MRAC provided a cheap Chinese HT, as well as Dan Workenahuer N9ASA providing one (he received it as a gift and didn't need it) and AES provided a \$50 gift certificate. The final profit for each club was \$631.82.

In 2016, the grand prize took a step up with a Yaesu FT-2900 high power 2M FM radio.

For the 2017 'fest, MATC decided to sell the auction building (it was in Waukesha County which is a problem for the school), so a new site was needed. Unfortunately this was not known until very late in 2016, so an easy choice was the Elk's Lodge on Good Hope Rd., across from the HRO store. The Milwaukee Repeater Club has had their hamfest there for a number of years. One drawback to not having the Channel 10 Auction site was we could not setup on Friday during the day. For the Elk's Lodge, setup had to happen Friday night after their fish fry was completed. Get home late and get up at 4 AM to be back before 6 AM. Ouch! This year also saw the grand prize of a Yaesu FT-3200 which is a 2M analog and Fusion radio. For the first time (their schedule was free), Tower Electronics was at the fest and was responsible for purchasing a number of tables (and contributed a number of small items for prizes). In fact, we

sold out all available tables and had to move the free table out into the hallway, outside the actual hamfest room.

For 2018 we return to the Elk's Lodge with a slightly earlier date (March 27) to miss the Easter holiday. Prizes again include N3FJP Logging Software and a Yaesu FT-3200 FM/Fusion 2M radio as well as trikets from Tower Electronics and the usual ARRL gift certificates given to clubs having a sanctioned hamfest. This year the radio is won by Fred Schwierske, KD9KOY (now W9KEY) a person who just took his Tech exam 6 days earlier at the Jefferson County hamfest (and we told him if he took his test with MRAC-VEC he would have received his call in only a couple of days instead of weeks)! Preliminary hamfest results are 220 tickets sold and profits for each club of \$484.25.

In 2019, due to room availability, the fest was held on March 23, which was 6 days after the Jefferson hamfest. Again, prizes consist of N3FJP logging software, a Yaesu FTM-3200 Analog and Fusion 2M radio, the usual ARRL gift certificates, and some items from Tower Electronics. The RF Adapter Guy gave us a gift certificate and new this year was 2 25 foot coax assemblies from ABR Industries in Texas (after a discussion with a company representative at HRO Superfest in September 2018). The radio was won by Mark Tellier AB9CD.

## Reminisces of the Daughter of Our Second President

(August 2005)

One day in July, 2005, Tom Schulte, AB9EK, the club Treasurer (2005) retrieved a message on the club answering machine from a Yvonne Robel, who it turns out, is the daughter of Clarence Crapo 9VD (later W9VD) who was the second President (1921) of MRAC. He was also President again in 1931 and 1940 besides holding other offices over the years. He passed away in 1973. Tom passed the information to me and I proceeded to contact her. She had found a collection of her father's slides of MRAC activities and thought the club would be interested in having them. I said sure and gave her my information. She offered to ship them at her expense. A few days later I received a package containing 75, glass mount, photographic slides, almost all with hand written notes along the slide mount detailing what the picture was. Also enclosed was the following letter. It was read at the August 2005 general club meeting and is reprinted here.

*My father, Clarence N. Crapo enjoyed many years with your organization. I'm glad to have found these slides, contacted you, and returned them to your membership where they'll be enjoyed. His other passion was photography. He was a master of stereo images. I have been active in photography as a profession and as a hobby (holding offices in camera clubs) for many years, influenced by my exposure to his work.*

*Some of these slides are in very poor condition as they were rescued from years of shed storage in Florida. The heat and humidity distressed some of the emulsion, but enough recognizable images remain to send along. He mounted his slides by hand, and after 60+ years the mountings are disintegrating. His precise small printing still amazes everyone in our family.*

*If even one of these old slides finds an interested relative or old friend it was worth the effort.*

*You may share these anecdotes of growing up with a-ham-for-a-dad with the membership if you like.*

*My dad was extremely fluid in Morse code. His fingers flew as he tapped out his message. I recollect, at the age of 4 or 5, sitting next to him on a stool, fascinated by the rhythm, squeaks, and static.*

*A standout in my memory of his voice contacts was about 1950. It was a Johannesburg chicken farmer who had 13 daughters, no sons. The British voice was clear from a "skip" (?). I remember them communicating more than once, and after my Dad knew how interested I was to hear the "voice from around the world", he would take me into the attic when he started calling him to see my delight when there was an answer.*

*The Shorewood police department was familiar with our address. W9VD used to clear the cobwebs out of television speakers for miles. There were many times my prim and proper Mother fielded their phone calls and blushed red with embarrassment. Once an officer showed up at our door to "Speak to Mr. Crapo" since the polite phone calls hadn't worked. It was probably during Elvis on Ed Sullivan.*

*In 1954 we custom ordered a brand new Oldsmobile 88 to replace the spotless 1941 Pontiac. My Mother carefully selected the classic turquoise and white, color matched the stripped upholstery, and most importantly, my Dad wanted it without a radio. She was so pleased as she considered radios in cars to be distracting. The day after we brought the new car home, he parked it in the driveway, just outside the garage, with an extension cord to the power drill. He was preparing to cut the hole in the dash for the Civil Defense Radio. Then he attached the long antenna. Of course the antenna was removed for family travel, and for their*

*trips to the supermarket, but my Mother never got over it.*

*After I graduated from Shorewood High School in 1961 and left Milwaukee, the giant 60 ft. wood pole and antenna in the backyard fell with a thundering blow, narrowly missing two garages.*

*Sincerely,  
Yvonne (Crapo) Robel  
Wellborn, Fl*

## Meeting Program History

(2019)

Over the years MRAC has had a number of interesting and informative meeting programs. Coordinating meeting programs is not an easy task. For many years it supposedly was the task of the First Vice-President. That actually kept many people from running for office – they were afraid they would have to find 9 or 10 meeting programs per year (more when the club met weekly). During the 1990s that official requirement was removed and the entire board became involved with setting up programs. Over the years some special guests have made presentations to the group including a number of ARRL officials, representatives of various manufacturers and even amateur radio “celebrities”. Some of the organizations and companies represented have been:

Amateur Electronic Supply

ARRL

F. Ed Handy W1BDI Communications Mgr.

Bob Inderbitzern NQ1R Marketing Mgr.

Bart Jahnke VEC Mgr.

Lew McCoy W1ICP Technical Assistant, Feature Author

Ed Tilton W1HDQ “*World Above 50 MHz*” QST Columnist

Bird Electronics Corp.

C. Crane Company

Centralab

Chicago Radio Laboratories

Electro Voice

Eldico

Fansteel Products

Jewell Electrical Instrument Co.

Marquette Electronics

Marquette University

Milwaukee School of Engineering

McMurdo-Silver Inc.

Ohmite

SDR Play

Shure Bros.

Telrex Corp.

Unified Microsystems

Gordon West

West Mountain Radio

David White Co.

Western Electric

Wisconsin Electric Co.

Wisconsin Inspection Bureau

Wisconsin Telephone Co.

Yaesu

The following is a list of some programs held over the years (and over time this list will grow to be sort of more complete).

### **1921**

December 8 – “The National Electrical Code and its Application to Radio Signaling Apparatus” by A.C. Schultz, Electrical Inspector for the Wisconsin Inspection Bureau.

### **1922**

October 13 – RF Transformers as used with Loop Aerials.

### **1923**

April 5 – A film by GE titled “The Wizardry of Wireless”.

May 17 – The Component Parts of a Receiver by R. H. C. Matthews. Also a second discussion of Three types of Transmitter Filters by Ed Howell 9CVI.

May 31 – The Zenith Tuner as well as a discussion of spark interference during designated quiet periods.

October 4 – H.S. Olson of Fansteel Products Co. on chemical rectifiers.

October 18 – J. H. Hiller of Jewell Electrical Instrument Co. on measuring vacuum tube characteristics.

November 15 – Rev. John B. Kremer S.J. Professor of Physics, Marquette University on Magnetism

November 22 – Leroy E. M. Clausing 9XN, Chicago Radio Laboratories on the design and construction of radio station WJAZ

December 13 – Karl E. Hassel 9ZN, Research Engineer, Chicago Radio Laboratories on the underlying characteristics of receiver design.

December 15 – Dinner at Hotel Maryland including talks on Cooperation between hams by R.H.G. Mathews, ARRL Central Division Director, Low loss tuners by Fred Marco (up from Chicago), Reminiscences of an old time radio operator by A.F. Parkhurst, Radio Inspector for the 9<sup>th</sup> District.

### **1924**

January 3 – Jack Knight of Western Electric Co. on the radio activities of Western Electric Co.

February 14 – 5 talks on radio subjects –

H.J. Marks Technical Editor of Radio Digest on Modern Radio Receiving Circuits,

E.T. Flewelling, Design Engineer of Buell Mfg Co. on “The Efficiency of Modern Radio Apparatus”,

David Grimes on the History of Radio Telephony.

### **1926**

January 26 – Power Line Interference by Tom Baily of the Electric Company.

### **1933**

May 18 – Harold M. Detrick (filling in for Mr. Silver) of McMurdo-Silver Inc. discussing the company’s new superheterodyne receiver.

June 6 – Diversity Antenna Reception by Frank Moore W9BVB

August 7 – Discussion of ARRL activities and amateur radio news by xxx Herbert.

### **1936**

February 27 – Mr. Hammersley of Ohmite Corp discussing the manufacture of the company’s resistors. 28 in attendance

### **1941**

October 9 – Mr. Feldman W9ETP of Stancor Manufacturing Co. on new transmitters produced by the company (model DC-3 and model 69)

October 16 – Relays (the electro-mechanical kind, not message relays) by Harry Halinton of Electronic Sales Co.

October 29 – Dinner party at the Schlitz Brown Bottle with F. E. Handy W1BDI ARRL Communications Manager.

November 6 – Don Fairbanks of IRC Co. The Evolution of Resistors and Volume Controls - 54 in attendance.

November 13 – General discussions - 47 in attendance.

December 6 – Bowling Party at Badger Alleys, 27<sup>th</sup> and Walnut St.

December 11 – Tom Baily of the Electric Co. on “Interference: Its Location and Correction” – 82 in attendance

## 1942

January 8 – after club business, general member ragchewing – 42 in attendance  
January 15 – The Effects of Sunspots on Radio Reception by Mr. Arnfield of Wisconsin Telephone – 24 in attendance  
January 22 – The Control of a Sawtooth Oscillator in an Oscilloscope by Louie Wollaeger W9ANA – 24 in attendance  
January 29 – General discussion as meeting started late - 24 in attendance  
February 5 – - 38 in attendance  
February 12 – Mr. Watts of Wisconsin Telephone on the History and Development in Carrier Telephone Systems – 36 in attendance  
February 19 – Al Kroner W9UIT (maybe at the time) on experiences as an early commercial radio operator – 34 in attendance  
February 26 - - 33 in attendance  
February 28 – MRAC Bowling Party  
August 2 – Picnic at Breezy Point Resort at Okauchee Lake

## 1943

December 30 – “Old Timer’s Nite” – Gettelman Brewery Rathskeller

## 1944

May xx – “Jamboree” – Gettelman Brewery Rathskeller  
September 21 – Various discussions and a presentation on facsimile equipment by Wendell Ciganek W9SYT  
October 12 – War Emergency Radio Service (WERS) discussion  
October 19 – informal party again at Gettelman Brewery Rathskeller

## 1949

December 22 – Speech amplifier and driver unit with with amplitude clipping and audio bandwidth limits by Roger Zaun W9UVV.  
December 29 – Old Timer’s Nite in the conference room of The Milwaukee Public Library with a demo of a Spark transmitter.

## 1950

January 5 – Show and Tell night.  
January 12 – Louis Wollaeger W9ANA on Transmission Lines and Antennas. Meeting held at the Blatz Auditorium including beer and buffet meal.  
April – Ceramic capacitors, printed circuit boards and their applications by J. B. Holtz, and H. E. Moore of Centralab. Their presentation utilized 3D slides which required the use of special glasses provided by the David White Co.  
April – The construction and theory of operation of microphones as well as applications of phono pickups by J. H. Morin of Shure Bros. of Chicago.  
April – “Stepping Along With Television” - covering communications during the last 100 years by L. W. Butler and Herb Zwarra W9MQA both of the Wisconsin Telephone Co.  
May – Speech amplifiers, clipping, and microphones by Webster Soules of ElectroVoice Corp, Buchanan, Mich. Mr. Soules QTH is Chicago. A special demonstration of a differential microphone for Army tank use was made.  
May 18 – Elections.  
December 28 – “Old Timers Nite”, Pabst Blue Ribbon Hall.

## 1951

April 19 – Ed Handy W1BDI, ARRL Communications Manager  
December 28 – “Old Timers Night” – Pabst Brewery - Blue Ribbon Hall

## 1955

December 29 – Old Timers Nite held at Pabst Brewery

## **1956**

January 19 – 2 Films on general electronics with discussion to follow  
February – Mike Ercolino of Telrex with a presentation on the company's beam antennas  
February – Oscilloscopes by John Jacobsen  
April 26 – Lew McCoy W1ICP ARRL Technical Assistant, QST Staff, Author  
May 3 – J. Stuart of Collins Radio on "The Big Difference between AM and SSB"  
May 17 – Elections  
May 24 – Member Party hosted by Don Merton W2OUL of Eldico (former club member)  
May 31 – Installation of Officers and Field Day Planning

## **1957**

January 4 – Old Timers Nite at Pabst Blue Ribbon Hall

## **1960**

April 21 – Discussion of club activities and policies.  
April 28 - "The Story of DX" a film by ARRL.  
May 19 – Auction  
July 17 – (Sunday) Picnic at Kletsch Park

## **1962**

May 3 – Auction – 59 in attendance.

## **1963**

March 14 – Lew McCoy of ARRL (38 in attendance).  
April 20 – Testimonial dinner for Jack Doyle W9GPI (MRAC Life Member and ARRL Central Division Director).  
December 26 - Old Timers Nite at Pabst Blue Ribbon Hall.

## **1965**

January 7 – Old Timer's Nite and Milwaukee Emergency Corps meeting – Pabst Blue Ribbon Hall  
January 21 – AUCTION (Travis Baird)  
February 4 – IMTS – Improved Mobile Telephone Set by Herb Zawarra W9MQA  
February 13 – Valentines Party at the Patio (East Howard Ave).  
February 18 – Hallicrafter's Night  
September 9 – Discussion of club activities and business.

## **1967**

April 6 – (20 in attendance)  
June 1 – Discussion of club activities and business including upcoming ARRL Central Division Convention put on by the club. Elections were also held.  
August 8 - Discussion of club activities and business including upcoming club picnic and the status of club license renewal.  
September 7 - Discussion of club activities and business and the upcoming changes to amateur rules called "Incentive Licensing".  
October 5 – Auction (42 in attendance).  
November 2 – Ross Hansch W9RBI discussed an Advanced and Extra training program conducted by the Four Lakes Radio Club in Madison. An additional program discussed a way to cover VHF ham bands with an AM/FM car radio by Frank Seboth W9NLY and Fred Eltzsch W9QMD.  
December 7 – Frank Seboth W9NLY gave a presentation on using pulse code modulation (PCM) to carry 24 channels of information on 2 pairs of wire (a telephone system).

## **1968**

March 7 – Auction.  
April 4 – General MRAC and AREC activities were discussed.  
May 2 – General club business / projects discussions.  
November 7 – Auction  
December 5 – Slide shows of Radio Row, Tokyo Japan, local ARES activities, and more member pictures

## 1972

May 11 – Miles Cundy K9HMQ of Amateur Electronic Supply on 2 Meter Transcievers.  
June 8 – Dick Kopplin WA9EOO on 13 months in Antarctica.  
October 12 – Frank Seeboth W9NLY on automatic, self-checking telephone systems.  
December 14 – Bob Goldstein K9KJT on Milwaukee Amateur Radio Emergency Corps (AREC)

## 1974

February 14 – Local Repeater Operations by John Lefeber W9VAT, Dick Scarvaci K9CAN, Paul Szczerbinski W9KHO, Jack McLeland W9ATK, Dave Knaus WA9POV, Jerry Kraczek K9HXA  
February 16 – Valentine's Day Dinner / Dance  
March 14 – Presentation by Al Malkasion of Wisconsin Electric on Power Grid Synchronization  
April 11 – Amateur Radio in Japan by Sus Musashi WB9BGJ  
May 9 – Elections / Solid State Morse and RTTY Keyboards by Milt Krauthoff W9BTQ  
June 13 – Teletype Converters by Al Belanger W9MDG  
September 12 – Home Brew 2M Transceiver by Walt Glish W9YYW  
October 10 – Stan Nawrocki W9HHF/W8LOA of MATC on "Electronics of the Future"  
November 14 – Auction  
December 12 – Stan Brown of Wisconsin Telephone and the film "*Minature Marvels*" covering the history of the transistor.

## 1976

January 8 – Old Timers Nite (for 1975) at Pabst Blue Ribbon Hall  
December 9 – Old Timers Nite at Pabst Blue Ribbon Hall

## 1978

April 20 – Paul Cornell of Bird Electronics talks about RF power measurement and a bit about his personal interest in old time radios.  
May 18 – Auction.  
September 21 – A discussion on amateur television (ATV) by K9KLM, K9YGZ, WB9HDG, and K9ZSR including a live demonstration having a video QSO with WA9ZIG who was at his home.  
October 12 – Special meeting consisting of a tour of the new Channel 6 studios and facilities, including watching the 10 PM newscast live.  
October 19 – Bob Paquette of Select Sound talks about some of his microphone collection. He will also discuss his trip to the National Historical Radio Conference. Also Charles Dettman discussed his personal old radio collection and Fred Linn W9NZF also discussed some old receivers and some old radio company history.  
November 16 – Frank Seymour of Dynascan Corp talked about industrial control products in use at Telemotive Co. in Chicago.

## 1979

January 18 – Randy Gascoyne of Wisconsin Telephone, with some help from Al Belanger W9MDG, discussed fiber optics for telephone use. (45 in attendance)  
February 15 – Ed Wille W9PWG on Master TV Antenna (MATV) installations. (44 in attendance)  
March 15 – Travels to the South Pole by a Professor Greenler (?) – (75 in attendance)  
April 19 – Dick Steffen, President of RVS Cable Television, spoke on the progress of installing cable television in Wauwatosa and Waukesha.  
May 17 – Auction and elections.  
June 7 – Field trip to Midwest Relay, a satellite relay station located in Rubicon (Washington Cty).  
June 21 – Wisconsin State Patrol Communications Overview by John LaBlonde W9FZC.  
September 20 – Russ Burss W9RKP on using a "Pole Pig" transformer in amplifier construction.  
October 18 – Dan Darse of Motorola on 2-way digital voice protection PLUS Mark Milinovich of Wisconsin Electric on nuclear power generation PLUS Reid Whipple K9IWC showing slides from this year's Field Day operation.  
November 15 – Sherm Carr W9NGT spoke on Weather Service operations.  
December 5 – Old Timer's Night (not yet called a Christmas party) at Pabst Blue Ribbon Hall. (125 in attendance).

## 1982

April 8 – Via AES, Dick Brainard W9KTN of Brainard-Wilson Marketing with a slide show on oscilloscopes and their applications along with a display of B&K oscilloscopes (which Brainard-Wilson represents and AES sells).  
May 13 – Auction and Elections.  
July 25 – Picnic at Jacobus Park.

## **1983**

February 10 – John Leekley WB9SMM talked about severe weather reporting and ARES. A severe weather film was also shown. (47 in attendance)

March 10 – Satellite TV by Ed Wille W9PWG including a live demo from a trailer mounted dish as operated by Jim Tromblay WB9LNU. (82 in attendance)

April 14 – Howie Manos and David Savage of Computerplan Inc. talking about the latest in PC type computers. (61 in attendance)

May 7 (Saturday) – Club Luncheon at Heidels Restaurant in West Bend

May 12 - Auction and Elections. (84 in attendance)

June 9 - Dr. George Steber, WB9LVI, Professor of Electrical Engineering and Computer Science at UWN, who will speak on "new developments in slow scan TV ---including color and hi-resolution capability", with a live demonstration. Dr. Steber was a speaker at the 1983 Dayton Hamfest.

July 24 – Picnic at Jacobus Park in Wauwatosa.

October 13 – Auction.

November 10 – The care and feeding of a 50KW AM broadcast transmitter for WISN radio by Frank Lorbecki Chief Engineer of WISN radio.

December 8 – Christmas Party at Pabst Blue Ribbon Hall.

## **1984**

March 8 – Ron Klein of Doerr Electric on design of power supplies PLUS showing of the film, "Amateur Radio's Newest Frontier" about ham radio aboard the Space Shuttle..

May 5 – Spring Luncheon at Heidels Restaurant in Jackson.

July 22 – Club Picnic

September 13 – John Lorbecki K9WUF on "Test Equipment Tricks".

## **1986**

April 10 – Multiwave Dipole Antennas by Sherm Karr W9NGT

October 10 – Noise Suppression by Greg Lengling WD9DHI

November 13 – Disaster at Chernobyl by Roger Newton Superintendent of Nuclear Engineering, Wisconsin Electric.

## **1987**

February 8 – Amateur Fast Scan Television by Ed Uhl WB9RYL and assistants.

## **1989**

February 23 – Old communications receivers by Fred Linn W9NZF

May 11 – Spring Dinner Party at Kuglitsch's Hall and Bowling

May 25 – Auction.

September 28 – Navy MARS by Fred Linn W9NZF

December 14 – Christmas Dinner Party at Tanner Paul Restaurant. \$10.00 per person.

## **1992**

April 30 – Radio Controlled Aircraft by Gordy Stahl of Milwaukee Simitar Squadron.

June 25 – Video Tapes - "Amateur Radio – The Early Years" and "The Mysterious Tesla".

November 27 (Friday due to scheduling conflicts) – More Video Tapes, this time on ATV balloon launches.

December 19 (Saturday) – Christmas Party at Maxims II Restaurant (1657 S. 108 St).

## **1993**

January 28 – Tour of Channel 18, 10 / 36 TV transmitters at the transmitter building (where the repeater would move to in the 2000's – of course we didn't know that yet).

February 25 – Dick Scarvaci K9CAN on the planning and installation of the Ozaukee repeater.

March 25 – Digital Multimeters.

April 29 – Another Tesla Videotape.

May 27 – Fox Hunting by Jim Tromblay WB9LNU

June 24 – Elections and Auction.

December 10 – Christmas Party at Patio Club. \$15.00 per person.

## 1994

July 28 – CQ Magazine video “*Getting Started in Amateur Satellites*” (35 in attendance).  
August 25 – CQ Magazine video “*Getting Started in VHF*”.  
September 29 – Lots of club business and Video on Outbacker mobile antenna (45 in attendance).  
November 23 – 1914 Spark Transmitter w/Demonstration by Jim Tromblay WB9LNU (49 in attendance).  
December 11 – Christmas Party Dinner – Alioto’s Restaurant, \$17.00 per person (84 people in attendance)

## 1995

January 25 – Video of Peter I Island Dxpedition.  
February 23 – Amateur Satellites (by unknown)  
March 30 – CRTs as used for TV picture tubes by Ed Wille W9PWG. Also new TNC (Terminal Node Controllers) also by Ed.  
May 25 – Off site meeting at Crites Field (Waukesha Cty Airport) at the hangar of the Confederate Air Force for a program on who they are as well as a WWII airplane restoration.  
June 29 – Video on the story of Wright-Patterson Air Force Base. This along with numerous discussions including a WWII gyroscope produced by A-C Spark Plug of Milwaukee and the FCC form 610 by Jack Krause W9JK and electronic filing by the MRAC VEC.  
July 27 – Radio Control of models (of all types) by Jim Tromblay WB9LNU along with Jim Jr. N9UNT.  
August 31 – Tour of WTMY AM transmitter in Union Grove  
September 28 – Video “*Code Breakers*” is shown dealing with WWII code breaking.  
October 30 – unknown video.  
November 30 – No program, just general discussion.  
December 3 – Christmas Party at Alioto’s Restaurant (hwy 100 and Burleigh)

## 1996

January 25 – Antenna Rountable  
May 30 –  
August 29 – Video on “The Navy’s Best Kept Secret – Diego Garcia”. (42 in attendance)  
October 31 – Video on Albert Einstein  
December 8 – Christmas Party at Alioto’s Restaurant (hwy 100 and Burleigh)

## 1997

November 20 – RF Emissions Testing

## 1998

February 26 – Basic Digital Electronics by Dave DeFebo WB9BWP  
March 26 – Basic Radio Math and Calculator Use by Ed Wille W9PWG  
April 30 – Ken Boston W9GA (then WF9X) on weak signal VHF and UHF Operating  
May 28 – The book “*Radio Warfare*” by its author, Marquette University Professor Larry Soley.  
July 30 – AMSAT and Satellites by Gary Bargholz N9UUR  
September 24 – Early spark transmitters (with live demos) by Jim Tromblay WB9LNU. Also special guest appearance by David Klatzco N9TQA candidate for ARRL Central Division Director.  
October 29 – Weatherproofing Solutions by Matt Planning KB9PRC (39 in attendance).  
November 19 – MARS (Military Affiliate Radio System) with emphasis on Navy MARS by CPO Craig Stundahl NNN0ASG (32 in attendance).

## 1999

January 28 – Milwaukee and Waukesha ARES by John Leekley WB9SMM Emergency Coordinator and MRAC member. Also 3 Kenwood radio promo video videos provided by AES.

February 25 – The new operations of the MRAC VEC by Dave DeFebo WB9BWP, John Kraak KF9XL, and Tom Fuzard KF9PU.

March 18 – Slide show tour of ARRL Headquarters by Bart Jahnke W9JJ ARRL VEC Manager (63 in attendance)

April 29 – The history of video tape recording by Jim Tromblay WB9LNU

June – APRS Part 2 by Brian White K9LCQ (34 in attendance).

July 29 – The Year 2000 and Possible Problems for Wisconsin Electric (unknown speaker from Wis Electric).

August 26 – Low Cost DXing by Rick Kissel

September 30 – Antenna Measurements and Antenna Comparisons by Dave DeFebo WB9BWP

October 28 – Whole House Generator by Ken Eggert W9MOT

November 18 – Surface Mount Technology Components by Matt Planning

## 2000

January 27 – How I got started in Ham Radio by the membership.

February 26 – How I Got Started in Ham Radio Part 2 (37 in attendance).

March 30 – Don Michalski W9IXG on What Is An ARRL Section Manager.

April 27 – General member discussion

May 25 – Auction

June 29 – Decibels by Matt Planning KB9PRC

July 27 – Bill Lubitz W9EMC on Kit Building and and Personal Experiences Building an Elecraft K2.

October – Member Antennas a roundtable led by Matt Planning KB9PRC (40 in attendance).

November 30 – Building a Wire J-Pole Antenna for 2M by Matt Planning KB9PRC and Jim Tromblay WB9LNU.

Includes members building antennas on site (some with help) (44 in attendance).

December 3 – Christmas Party at

## 2001

January 25 – The new home of the club repeater by Dave DeFebo WB9BWP

February 22 – Discussion on contesting and various operating practices (38 in attendance).

March 29 – Severe Weather spotting by Skip Voros WD9HAS (49 in attendance).

April 26 – Amateur Satellites by Gary Bargholz N9UUR.

May – Auction and Elections (43 in attendance).

June 28 – Off site meeting at the Confederate Air Force hangar at Crites Field (Waukesha County Airport).

Program by Bill Tromblay N9UNS (son of Jim WB9LNU) and officers of the Confederate Air Force on their work restoring a PV-2D Harpoon aircraft.

August 30 = Lightning damage to the repeater – finding it, and fixing it. Also video of Field Day 2001 by Roger Zaun W9UVV (42 in attendance).

September 27 – Video presentations of the new Kenwood TS-2000 transceiver and proper soldering techniques (40 in attendance).

October 25 – Presentation by Matt Planning KB9PRC on direction finding antennas for 315 MHz used in locating people with automotive remote key fobs. The technique was used in survivor searching at the World Trade Center attack on 9/11 (49 in attendance).

December 2 – Christmas Party at The Machine Shed, Waukesha

## **2002**

January 31 – Possible Ham Exhibit at Discovery World by Don Doss K9QEN and Vertical Antenna Installation and Testing by Dave DeFebo WB9BWP (36 in attendance)  
February 28 – FCC Website and ULS / CORES numbers by Matt Planning KB9PRC (39 in attendance)  
March 28 – How I Got Into Ham Radio by everyone! (38 in attendance)  
April 25 – How I Got Into Ham Radio Part 2 (36 in attendance)  
May – Auction (38 in attendance)  
June 27 – PSK31 Demo by Jerry Wahlen WA9CGE  
July 25 – Field Day in Pictures as Well as Past Field Days by Dave DeFebo WB9BWP. (32 in attendance)  
August 29 – NCVEC Conference by John Kraak KX9XL and Tom Fuszard KF9PU and New MRAC Repeater System by Mark Tellier AB9CD (43 in attendance)  
September 26 – ARES Van by Phil Rebensburg KC9CI. (42 in attendance)  
October 30 – Model Rocketry by Brian While K9LCQ and Jeff Annis K9VS. (45 in attendance)  
November 22 – Power Pole Connectors by Patrick Moretti W9UQ  
December 1 – Christmas Party at the Machine Shed Restaurant

## **2003**

July 31 – Mark Tellier AB9CD on the process of his tower install in the city of Brown Deer. (36 in attendance)

## **2004**

January 29 – Antenna Wind Loading by Jeff Annis K9VS. (34 in attendance)  
February 26 – Discussion on preposed licensing changes moderated by Dick Wood W9JBE. (38 in attendance)  
March 25 – Op Amps – What They Are and Do by Mark Tellier AB9CD. (36 in attendance)  
April 29 – Wire Antennas by Don Michalski W9IXG (ARRL Wis Section Manager). (47 in attendance)  
May 27 – AUCTION and elections. (42 in attendance)

## **2005**

May 26 – Auction and elections.  
June 30 – Field Day review.  
August 25 – The new club web site by Howard Parks AB9FH.  
September – Contesting by Dick Wood W9JBE.

## **2006**

March 30 – Gordon West WB6NOA makes his first appearance at an MRAC meeting.  
May 25 – Auction and Elections

## **2007**

March 29 – Gordon West WB6NOA makes his second appearance at an MRAC meeting sharing the program with Bob Inderbitzen NQ1R ARRL Marketing Manager.  
May 31 – Auction and Elections

## **2008**

March 27 – A return appearance by Bob Inderbitzen NQ1R ARRL Marketing Manager.  
May 29 – Auction and Elections  
August 28 – The Softrock SDR receiver by Tom Macon K9BTQ.  
September 25 – Videos from Amateur Logic TV on Softrock receiver kits and club providing one for someone to build for future programs.

## **2009**

January 29 – Digital (Broadcast) Television by Dave Schank KA9WXN  
March 26 – MRAC VEC by Tom Fuszard KF9PU  
April 30 – Automatic Antenna Tuners by Jerry Kraczek K9HXA  
May 28 – Auction and Elections  
July 30 – The SoftRock receiver SDR Project (paid for by MRAC) by Pancho Doneis KA9OFA  
September 24 – Mobile CW by Pat Hoppe WW9R and Special Guest Harald (AI) Kjode, LA9SN from Norway  
November 19 – DStar by Dave Schank KA9WXN

## **2010**

January 21 – VHF Contesting and Weak Signal Work by Todd Sprinkmam KC9BQA  
February 25 – Big Antennas by Dick Wood W9JBE  
March 25 – Logbook Of The World by Brian Cieslak K9WIS  
April 22 – Member Show and Tell  
May 27 – Auction and Elections  
June 24 – Field Day, Past and Present  
September 30 – First Robotics  
October 28 – Solar Power by City of Milwaukee  
November 18 – Do It Yourself Electric Car

## **2011**

January 27 – FM Simplex Contest, MRAC / MAARS Hamfest, By-Laws changes and other boring business  
February 24 – Fox Hunting by Paul Gruettner WB9ODQ  
March 31 – Gordon West WB6NOA made his third appearance, along with his book publisher, Pete Trotter KB9SMG.  
April 28 – Member Show and Tell  
May 26 – Auction  
November 17 - Show and Tell of member antenna installations

## **2012**

January 26 – Show and Tell of member antenna installations – Part 2.  
February 23 – Post Xmas, post Hamfest party (Free Food)  
March 29 – Gordon West WB6NOA made his fourth appearance, along with his book publisher, Pete Trotter KB9SMG.  
April 26 – Darren Rook KC9SSL of West Mountain Radio on their digital operating mode products and Elections.  
May 31 – Auction.  
September 27 – Darren Rook KC9SSL of West Mountain Radio on their DC power control products.

## **2013**

January 31 – The Arduino – An open source microcontroller design by Gary Sutcliff W9XT  
February 28 – Post Xmas, post Hamfest party (Free Food)  
March 28 – HD Radio by Chris Tarr W9JOL radio station engineer / consultant  
April 25 – HF Digital modes and operating by Joe Schwarz N9UX and Al Maahs KC9IJJ  
May 30 – Auction  
June 27 – An APRS Overview by Steve Sundquist N9FSE  
September 26 – Group discussion on new radios for new hams  
October 31 – The (attempted) Repair of the Club Field Day Antenna by Dave Schank KA9WXN  
November 21 – A Homebrew Tilt Over Telescoping Mast and Antenna Tuning by Dave DeFebo WB9BWP

## **2014**

January 30 – Upcoming club events (FM Contest, Hamfest, etc.) and NASA Video on Juno Satellite  
February 27 - Post Xmas, post Hamfest party (Free Food)  
March 27 – Antenna Modeling on a computer by Jeff Annis K9VS  
April 24 – Report and show and tell of balloon launch one week earlier by Sam Turner and his dad Lee  
May 29 – Auction  
June 26 – Field Day Plans, Member Show and Tell, Field Day Past  
September 25 -  
October 30 -  
November 20 – Basic Oscilloscopes by Mark Tellier AB9CD, Dave Schank KA9WXN, and Dave DeFebo WB9BWP

## 2015

January 29 – Wisconsin QSO Party by, MRAC history of Wis QSO Party by Dave DeFebo WB9BWP, FM Simplex Contest by Joe Schwarz NU9X

February 26 – The Post-Holiday and other things party (free food).

March 19 – Chris Wilson N0CSW, Yaesu National Sales Manager discussing Yaesu products and new company operations, including giving away a new Yaesu Fusion HT – (38 in attendance).

April 30 – High Altitude Balloon recovery and results by Joe Schwarz N9UX

May 28 – Auction – (48 in attendance).

June 25 – Field Day Info and favorite phone / tablet / PC applications roundtable

September 24 – Discussions on upcoming Maker Faire and Amateur Radio booth, new club logo contest, getting new hams / new members – (26 in attendance)

## 2016

January 28 – USB Microscope and SMT Hot Air Soldering by Dave DeFebo WB9BWP, Some MRAC history bites leading up to 100<sup>th</sup> Anniversary. (24 in attendance)

February 25 – Post holiday, hamfest, Simplex Contest food. (22 in attendance)

March 31 – APRS in Public Service by Matt Welch W8DEC (of Amateur Electronic Supply of Cleveland) as well as some comments on the upcoming 100<sup>th</sup> anniversary of MRAC by Bob Inderbitzen NQ1R, Marketing Mgr. of ARRL. (28 in attendance).

April 28 – The Dayton Hamvention Experience, a group discussion. Also club elections. (27 in attendance)

May 26 – Auction. (44 in attendance)

June 30 – Field Day wrap up and other miscellaneous club stuff, including 100<sup>th</sup> anniversary items. (19 in attendance)

September 29 – The latest info on High Altitude Ballooning by Joe Schwarz N9UX.

October 27 – Yaesu Fusion and Wires-X including a live demo by Dale Webler AB9DW. (32 in attendance)

November 17 – “Setting up your Shack” – group discussion. Also 100<sup>th</sup> anniversary plans so far. (17 in attendance)

## 2017

January 26 – General discussion on feedlines and also 2017 anniversary events. (31 in attendance)

February 23 – Post holiday and FM contest FOOD!

March 30 – Kermit Carlson W9XA, ARRL Central Division Director on various ARRL Information PLUS Presentation of a Commemorative Plaque to MRAC in Recognition of our 100<sup>th</sup> Anniversary. (25 in attendance)

April 27 – Misc Club Discussions and Brief Coverage of Repeater Coordination. (26 in attendance)

May 25 – Auction

June 29 – Field Day wrap up with pictures. Discussions on Maker Faire and Superfest in fall. (16 in attendance)

September 28 – Yaesu reps demoing and discussing new features of “Fusion 2”. (29 in attendance)

October 21 – 100<sup>th</sup> Anniversary Dinner at Carl’s Catering in Greendale.

October 26 – Dale Webler AB9DW on the SharkRF OpenSpot. (20 in attendance)

November 30 – Dave Schank KA9WXN on the forthcoming local TV station realignment. (25 in attendance)

## **2018**

January 25 – Mars Exploration and Driving the Mars Rover by Dr. Eric Baumgartner (former JPL engineer, current MSOE VP). (27 in attendance)

February 22 – Post holiday and FM contest FOOD! (24 in attendance)

March 29 – Gary Sutcliff W9XT on propagation. (25 in attendance)

April 26 – Hams aiding Puerto Rico after hurricane Maria, in fall of 2017 by Valerie Hotzfeld NV9L (26 in attendance)

May 31 – Auction. (38 in attendance)

June 28 – Field Day debriefing along with an impromptu discussion of antenna topics based on questions by a number of new hams in the audience. (11 in attendance)

September 27 – Steve Brightman, of the North American Operations of SDR-Play gave a presentation on the use of the SDR-Play family of black box software defined radio receivers produced by the company. (22 in attendance)

October 25 – Upcoming 100<sup>th</sup> anniversary of ARRL affiliation discussion. Also photos of recent club activities. Also discussion of an Egyptian vacation with Darlene Berglund KC9SBN

November 29 – Ground and Bonding by Dave Schank KA9WXN including a group discussion on the subject. (18 in attendance)

## **2019**

January 31 – Meeting Cancelled due to extreme cold weather.

February 28 – Post Holiday FOOD! (23 in attendance)

March 28 – Digital Voice Hotspots by Dale Webler AB9DW and FT-8 by Stan Siehndel KD9AUY (30 in attendance)

April 25 – ARISS Project Status Report by Ted Carlson N9KQQ and Joe Schwarz N9UX (21 in attendance)

May 30 – Auction conducted for the first time by Curt Smith N9CBS (29 in attendance – Curt didn't sign in)

June 27 – Field Day wrap up (with pictures) and discussions of Central Division Convention / HRO Superfest in September with celebration of 100 years of ARRL club affiliation (19 in attendance)

September 26 – Being the day before Superfest / Central Division Convention -

## Past Presidents of MRAC

(2018)

1917 Committee headed by L.S. Baird  
1918 L.S. Hillegas Baird 9HO  
1919 L.S. Hillegas Baird 9HO  
1920 Clarence Crapo 9VD  
1921 Daniel Gellerup 9AOE  
1922 Herbert Wareing 9NY  
1923 Edward T. Howell 9CVI  
1924 Edward T. Howell 9CVI  
1925 Charles Polacheck 9DTK  
1926 Fred Catel W9DTK  
1927 Freemont D. Schunck W9AFZ  
1928 Donald Seibel W9ESF  
1929 George Ward W9DCE  
1930 Louis Wollaeger W9ANA  
1931 Clarence Crapo W9VD  
1932 Frank Moore W9BVB  
1933 Dr. Charles A. Rosenbaum W9GHN  
1934 Emil Felber W9RH  
1935 Erwin Kries W9HRM  
1936 George Ruger W9VWG  
1937 Charles Meyer W9GVL  
1938 William Brossman W9EQP  
1939 Norbert J. (Dick) Richard W9OUB  
1940 Clarence Crapo W9VD  
1941 Joseph Kircher W9NRX  
1942 Norman Barnes W9CDY  
1943 Norman Barnes W9CDY  
1944 Norman Barnes W9CDY  
1945 John Scarvaci W9GIL  
1946 Ralph Koenig W9RUF  
1947 Fred Catel W9DTK  
1948 George Bowen W9DWI  
1949 Ralph Koenig W9RUF  
1950 Fred Zolin W9ONY  
1951 Fred Zolin W9ONY  
1952 Thomas Gettelman W9IZO  
1953 Ken Eggert W9MOT  
1954 Elden Belanger W9MDG  
1955 Emil Felber W9RH  
1956 Raymond Peschek W9LJU  
1957 Richard Oberholtzer W9ZPV  
1958 Douglas Pavek W9FDX  
1959 Ken Eggert W9MOT  
1960 Arlan Bowen W9QYW  
1961 Russell Burss W9RKP  
1962 J. Travis Baird W9VQD  
1963 Royal Miller W9CJO  
1964 Carl Rohde W9ROM  
1965 Carl Rohde W9ROM

1966 Bernard Tower K9ZPP  
1967 J. Travis Baird W9VQD  
1968 J. Travis Baird W9VQD  
1969 Richard Oberholtzer W9ZPV  
1970 Richard Oberholtzer W9ZPV  
1971 Richard Oberholtzer W9ZPV  
1972 Jack McLeland W9ATK  
1973 Jack McLeland W9ATK  
1974 Lee Mushel K9WRU  
1975 Elden Belanger W9MDG  
1976 Elden Belanger W9MDG  
1977 Elden Belanger W9MDG  
1978 Robert Glamm W9UGN  
1979 Robert Glamm W9UGN  
1980 C. Reid Whipple K9IWC  
1981 C. Reid Whipple K9IWC  
1982 Dave DeFebo WB9BWP  
1983 Dave DeFebo WB9BWP  
1984 Chris Welton WD9GZL  
1985 Ted Stiller WA9RDI  
1986 Ted Stiller WA9RDI  
1987 Harry Cieszki KD9AJ  
1988 Harry Cieszki KD9AJ  
1989 Ed Wille W9PWG

### Start of 2 year terms...

1990 Ed Wille W9PWG  
1992 Ed Wille W9PWG  
1994 Ed Wille W9PWG  
1996 Ed Wille W9PWG  
1998 Dave DeFebo WB9BWP  
2000 Dave DeFebo WB9BWP  
2002 Patrick Moretti W9UQ  
2003 Kevin Reemes KC9BZU  
2004 Patrick Moretti W9UQ  
2006 Howard Parks AB9FH  
2008 Howard Parks AB9FH  
2009 Brian Bieger KC9HEK  
2009 Mark Tellier AB9CD  
2010 Dave DeFebo WB9BWP

### New term structure...

2012 Dave Schank KA9WXN  
2013 Dave Schank KA9WXN  
2014 Dave Schank KA9WXN  
2015 Dave Schank KA9WXN  
2016 Dave Schank KA9WXN  
2017 Dave Schank KA9WXN  
2018 Dave Schank KA9WXN  
2019 Dave Schank KA9WXN

## Past Officers and More of MRAC

(2019)

In 2005 while pouring through recently donated archives of Emil Felber W9RH, a list of club officers from 1922-1966 was found. The list covered officers, but not necessarily directors. Later in the year, Jim Tromblay WB9LNU presented me with a list he worked on which covered through the years 1997. This list included directors and some committee chairmen and members. Using those lists as well as past rosters the following list has been compiled. For 2008 the list is still not complete, but more additions have been made including the 1948 ARRL National Convention committee chairmen. We keep uncovering new information every month. Maybe the list will be finished someday. We are not trying to leave anyone out. Committee chairs are listed where that information was available. Committee members may be listed also. If anyone was missed, we are sorry. Every effort has been made to ensure correctness. If you were an officer or on a committee and not listed here please let us know. One thing you can see is it takes a lot of people to run a club. You can also see some people keep stepping up to lend a hand to the club. Whose name appears most in this list? Is your name on this list? Will it be? If not, why not?

### 1919-1920

Pres - L. S. Baird 9HO  
VP - Clarence Crapo 9VD  
Secretary - R. A. Teschan  
Treasurer - T. V. Weston  
Business Mgr - R. A. Pelishek  
Sergeant At Arms – Cornelius Prinslow 9OV  
Chairman - L. S. Baird 9HO  
Directors:  
A. C. Kletzsch Jr.  
A. Bertram Lord  
R. A. Pelishek  
C. S. Polacheck 9CMP  
Rudolf Tischan  
Thomas Weston  
Publicity Mgr – M. B. Grogan  
ARRL City Manager - L. A. Degner

### 1920 – 1921

Pres - Clarence Crapo 9VD  
VP – A. B. Lord 9  
Secretary – Louis Heyman  
Treasurer - E. W. Ruppenthal  
Chairman - L. S. Baird 9HO  
Business Mgr - E. W. Ruppenthal  
Publicity Mgr – M. B. Grogan  
**ARRL City Manager - Clarence Crapo 9VD**

### 1921-1922

Pres - Daniel Gellerup 9AOE  
VP – Herb Wareing 9NY  
Secretary – L. W. Klingbiel  
Treasurer - E. W. Ruppenthal  
Chairman – Clarence Crapo 9VD  
Past Pres - L. S. Baird 9HO  
Business Mgr - E. W. Ruppenthal

### 1922-1923

Pres - Herb Wareing 9NY  
VP – Edward T. Howell 9CVI  
Secretary - H. G. Fawcett  
Treasurer - E. W. Ruppenthal  
Sgt at Arms - J. G. Montague  
Publicity Mgr – M. B. Grogan  
Chairman - Clarence Crapo 9VD  
Directors:  
Dan W. Gellerup 9AOE  
Edward T. Howell 9CVI  
E. W. Ruppenthal  
A. J. Sinandl  
I. H. Strassman  
Herb Waring 9NY  
Membership Committee - Klingbiel  
Meetings and Papers Committee: L. S. Baird 9HO  
Technical Committee - Edward T. Howell 9CVI  
Relay and Interference Committee – the City  
Manager  
Publications – R. W. Stone  
**ARRL City Manager – I. H. Strassman**

### 1923-1924

Pres - Edward.T. Howell 9CVI  
VP - M. F. Szukalski Jr. 9AAP  
Secretary - C. S. Polacheck 9CMP  
Secretary - Fred Catel 9DTK  
Treasurer - E. W. Ruppenthal  
Assistant Treasurer - Fred Catel 9DTK  
Business Mgr - L. S. Baird 9HO  
Directors:  
Edwin A. Carey 9ATO  
Clarence Crapo 9VD  
Mark H. Doll 9ALR  
G. Forrest Metcalf 9DXQ  
Erwin G. Nickel 9ATO

### 1924-1925

Pres – Edward T. Howell W9CVI  
VP - C. S. Polacheck  
Secretary - Fred Catel W9DTK  
Treasurer - E. W. Ruppenthal

### 1925-1926

Pres - C. S. Polacheck  
VP - Fred Catel 9DTK  
Secretary/Treasurer - John Meyer  
Treasurer - E. W. Ruppenthal  
Directors:  
Fred Catel 9DTK  
George Coates  
Malcomb Jameson  
Erwin Nickel 9ATO  
Fremont Schunck 9AFZ  
Sam Snead  
Business Mgr - E.T. Howell 9CVI  
Papers (?) - R. Knoff  
Badger ARRL News:  
Fred Catel 9DTK  
Robert Knoff 9DXH  
Ben Chromy 9CJO  
George Coates  
Fremont Schunck 9AFZ  
Sam Snead  
John Meyer 9BKR  
**Ass. Div. Mgr. Wis. Section ARRL – Clarence Crapo 9VD**

### 1926-1927

Pres - Fred Catel W9DTK  
VP - R. Knoff  
Secretary/Treasurer - F. D. Schunck W9AFZ  
Business Mgr – Anstutz  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### 1927-1928

Pres - F. D. Schunck W9AFZ  
VP - R. Knoff  
Secretary/Treasurer - Don Seibel W9ESF  
Business Mgr - Fred Catel W9DTK  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### 1928-1929

Pres - Donald Seibel W9ESF  
Secretary/Treasurer - F.J. Jutrash W9ALL (resigned 11/7/28)  
Secretary/Treasurer (11/15/28) - Harold R. Reiss W9ERS  
Publicity - Fred Catel W9DTK  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### 1929-1930

Pres - George Ward W9DCE  
VP - Louis Wollaeger W9ANA  
Secretary/Treasurer - Otis Stomer  
Business Mgr - Donald Seibel W9ESF  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### 1930-1931

Pres - Louis Wollaeger W9ANA  
VP - O. E. Zander W9DIJ  
Secretary/Treasurer - G. E. Woodward  
Secretary/Treasurer (5/21/31) - Herb F. Wareing W9NY  
Business Mgr - Clarence Crapo W9VD  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### 1931-1932

Pres - Clarence Crapo W9VD  
VP - Charles Meyer W9GVL  
Secretary/Treasurer – H. G. Barnes  
Chairman - Clarence Crapo W9VD  
Directors:  
Fred Catel W9DTK  
Charles Meyer W9GVL  
Donald Seibel W9ESF  
Herb F. Wareing W9NY  
G. F. Ward  
Louis Wollaeger W9ANA  
**ARRL Wis. Section Communication Mgr. – Clarence Crapo W9VD**

### **1932-1933**

Pres - Frank Moore W9BVB  
VP - Dr. Charles A. Rosenbaum W9GHN  
Secretary/Treasurer - Louis Wollaeger W9ANA  
Publicity - S. Michaels  
Committees  
Technical:  
Herb F. Wareing W9NY  
Louis Wollaeger W9ANA  
Publications – Bernard Phillippsen W9CRG  
Program & Publicity - Donald Seibel W9ESF  
Traffic - Emil Felber W9RH  
Legal – Leo Topolinski  
Membership - O. E. Zander W9DIJ

### **1933-1934**

Pres - Dr. Charles A. Rosenbaum W9GHN  
VP - Erwin Kreis W9HRM  
Secretary - Herb J. Parish W9CCD  
Treasurer - O. E. Zander W9DIJ  
Business Mgr - Donald Seibel W9ESF  
Chairman - Frank Moore W9BVB  
Technical Committee Chair:  
Herb Wareing W9NY  
Louis Wollaeger W9ANA  
Membership Committee Chair – O. E. Zander W9DIJ  
Publications Committee Chair:  
Bernard Phillippsen W9CRG  
Program and Publicity Committee Chair:  
Donald Seibel W9ESF  
Traffic Committee Chair - Emil Felber W9RH  
Legal - Leo Topolinski

### **1934-1935**

Pres - Emil Felber W9RH  
VP - C. Sennef  
Secretary - Hal Kurth W9FSS  
Secretary (9/6/34) - George J. Wood W9DII  
Treasurer - Louis Wollaeger W9ANA

### **1935-1936**

Pres - Erwin Kries W9HRM  
VP - Oliver E. Zander W9DIJ  
Secretary - Herb Baker W9GSP  
Treasurer - Raymond Peschek W9LJU  
Directors:  
Emil Felber W9RH  
Charles Meyer W9GVL  
C. A. Rosenbaum W9GHN  
Louis Wollaeger W9ANA  
Business Mgr – C. A. Rosenbaum W9GHN  
Papers and Publications:  
Charles Meyer W9GVL  
Robert Moser W9NPS  
Membership Committee – Irvin Berens – W9DFJ  
Publicity Committee – Emil Felber W9RH  
Sgt At Arms – George Ruger – W9DVD  
Technical Committee – Louis Wollaeger W9ANA  
Traffic Committee –  
Code Class Instructor -

### **1936-1937**

Pres - George Ruger W9VWG  
VP - H. Peschek W9LJU  
Secretary - Charles Meyer W9GVL  
Treasurer - Al Krones W9UIT  
Publicity - Fred Seifert W9EFX

### **1937-1938**

Pres - Charles Meyer W9GVL  
VP - William Brossman W9EQP  
Secretary/Treasurer - Fred Seifert W9EFX  
Business Mgr - Erwin Kries W9HRM

### **1938-1939**

Pres - William Brossman W9EQP  
VP - N. J. Richard W9OUB  
Secretary/Treasurer - George Ruger W9VWG  
Business Mgr - Erwin Kries W9HRM  
Directors:  
Lambrect  
Siefert  
Louis Wollaeger W9ANA  
H. Peschek W9LJU – Alternate  
Program Committee - N. J. Richard W9OUB  
Picnic – Wilkenson W9EEL  
**ARRL Central Division Assistant Director – Fred  
Catel W9DTK**

### **1939-1940**

Pres - Norbert J. (Dick) Richard W9OUB  
VP - Louis Wollaeger W9ANA  
Secretary/Treasurer - George Bowen W9DWI  
Business Mgr - Erwin Kries W9HRM  
Publicity - Emil Felber W9RH  
Interference Committee - Louis Wollaeger W9ANA  
Code Instruction – Fred Lambrecht W9YEG  
Wisconsin Hobby Exposition Demo Chairman –  
Oliver Zander W9DIJ  
**ARRL Wis. Section Communication Mgr. – Al  
Krones W9UIT**

### **1940 Wisconsin ARRL Convention:**

General Chairman - Erwin Kries W9HRM  
Co-Chairman - Oliver Zander W9DIJ  
Secretary - George Ruger W9VWG  
Commercial - George Bowen W9DWI  
Publicity - Joe Kircher W9NRX  
Ex-Officio - N. J. Richard W9OUB  
Program - Louis Wollaeger W9ANA  
Prizes:  
Clarence Crapo W9VD  
Herb Reinke W9ESO  
Roman Hudzinski W9IPS  
Robert Schmidt W9VDY  
Fred Seifert W9EFX  
Registration:  
Ray Paechek W9LJU  
Emil Felber W9RH  
Ladies:  
Mrs. R. S. Porth, XYL W9IZT  
Miss M. F. Gale, YL W9ESO

### **1940-1941**

Pres - Clarence Crapo W9VD  
VP - Joseph Kircher W9NRX  
Secretary/Treasurer - Herb Reinke W9ESO  
Business Mgr - Erwin Kries W9HRM  
Field Day - Oliver Zander W9DIJ

### **1941-1942**

Pres - Joseph Kircher W9NRX  
VP - Jack Doyle W9GPI  
Secretary - Reid Burrows W9JCW  
Treasurer - Emil Felber W9RH  
Business Mgr - Erwin Kries W9HRM  
Directors:  
Al Krones W9UIT  
Charles Meyer W9GVL  
Picnic - Emil Felber W9RH  
Historian - Emil Felber W9RH  
Code Instruction-Tony Barszcz W9HPZ  
**ARRL Section Emergency Coordinator - Oliver  
Zander W9DIJ**

### **1942-1943**

Pres - Norman Barnes W9CDY  
VP - Fred Zolin W9ONY  
Secretary - John Scarvaci W9GIL  
Treasurer - Ray Behmke W9DJC  
Treasurer (11/3/42) - Emil Felber W9RH  
Business Mgr - Erwin Kries W9HRM  
**AREC Emergency Coordinator – Wendell Ciganek  
W9SYT**

### **1943-1944**

Pres - Norman Barnes W9CDY  
VP - John Scarvaci W9GIL  
Secretary - Thomas Gettelman W9IZO  
Treasurer - Emil Felber W9RH  
Bulletin Editor – Erwin Kries W9HRM  
**ARRL Section Communication Manager (SCM) –  
Emil Felber W9RH**

### **1944-1945**

Pres - Norman Barnes W9CDY  
VP - Thomas Gettelman W9IZO  
Secretary - Erwin Kries W9HRM  
Treasurer - Emil Felber W9RH  
Directors:  
Jack Doyle W9GPI  
Charles Meyer W9GVL  
Ray Paechek W9LJU  
John Scarvaci W9GIL  
Bulletin Editor – Erwin Kries W9HRM

### **1945-1946**

Pres - John Scarvaci W9GIL  
VP - Ralph Koenig W9RUF  
Secretary - Erwin Kries W9HRM  
Treasurer - Emil Felber W9RH  
Directors:  
Norman Barnes W9CDY  
Thomas Gettelman W9IZO  
Jack Doyle W9GPI  
Charles Meyer W9GVL  
Irving Jackson W9CID

### **1946-1947**

Pres - Ralph Koenig W9RUF  
VP - Dr. J. F. Wyman W9SZH  
Secretary - Cyril V. Shallow W9SQK  
Treasurer - Louis Wollaeger W9ANA  
Directors:  
Charles Meyer W9GVL  
Al Krones W9UIT  
Emil Felber W9RH  
George J. Pfister W9IZQ  
License Trustee - Al Krones W9UIT

## 1947-1948

Pres - Fred Catel W9DTK  
VP - George Bowen W9DWI  
Secretary - Lester Reinmund W9PTE  
Treasurer - Emil Felber W9RH  
Directors:  
Jack Doyle W9GPI  
Thomas Gettelman W9IZO  
Charles Meyer W9GVL  
George J. Pfister W9IZQ  
License Trustee - Louis Wollaeger W9ANA  
**ARRL Central Division Director - Clyde C. Richelieu W9ARE**

## 1948 ARRL National Convention:

Chairman - Jack Doyle W9GPI  
Vice Chairman and Program Co-ordinator – Fred Catel W9DTK  
Secretary Les Reinmund W9PTE  
Audit:  
Louis Wollaeger W9ANA  
George Toppe W9QFL  
Finance – Wes Correll W9FY  
Housing Fred Morton W9AMB  
Registration – Joe Collins W9PYM  
IRE-BCE – Joe Kircher W9NRX  
Publicity – Sidney Rose W9VKC  
Decorations – Cy Wysocki W9DOS  
Exhibit Manager – George Bowen W9DWI  
ARRL Booth – H. Wilson W9NAV  
MRAC Booth – H. H. Devendorf  
Prizes – Travis Baird W9VQD  
Ladies Activities – Mrs. George Toppe W9AYX  
Entertainment – Tom Gettelman – W9IZO  
Wouff Hong – Charlie Meyer W9GVL  
Program – Emil Felber W9RH  
Printing – John Scarvaci W9GIL  
VHF – Frank Maiorana W9TPT  
Technical Talks and Speakers – George Pfister W9IZQ  
Hidden Transmitter Hunt – Clarence Burke W9KEU  
Historical – Clarence Crapo W9VD  
C.A.R.C.C. – Art Kraatz W9HPX  
Chicagoland Mobile Club – Harry Harrison W9LLX

## 1948-1949

Pres - George Bowen W9DWI  
VP - Ralph Koenig W9RUF  
Secretary - Curtis Schultz W9LZU  
Secretary (11/30/48) - Joseph Collins W9PYM  
Treasurer - Leonard Benson W9BNN  
Directors:  
J. Travis Baird W9VQD  
Joseph Collins W9PYM  
Hugh Wilson W9NAV  
John Scarvaci W9GIL (alternate)  
Chatter – Harry Paston W9DJV  
Membership – Robert Streeter W9KKX  
Technical – Louis Wollaeger W9ANA  
Programs – Joseph Collins W9PYM  
Contest – Russell Greenwood W9LVR  
Public Relations – Aldrich Kronos W9UIT  
Code Instructor – Curtis Schultz W9LZU  
Roster – Ralph Koenig W9RUF  
Publicity H. Ellis Saxton W9UMX  
Legal Consul – Paul Leeb W9TKY  
PA.System – Lester Reinmund W9PTE  
**AREC Wisconsin Section Emergency Coordinator – Curtis Schultz W9LZU**  
**AREC Milwaukee County Emergency Coordinator – Ralph Koenig W9RUF**  
**AREC Chief of Liaison – H. H. Devendorf**  
**ARRL Central Division Director - Clyde C. Richelieu W9ARE**

## 1949-1950

Pres - Ralph Koenig W9RUF  
VP - Fred Zolin W9ONY  
Secretary - Art Vahovius W9VSO  
Treasurer - Leonard Benson W9BNN  
Treasurer - George Bowen W9DWI  
Directors:  
George Bowen W9DWI  
Clarence Burke W9KEU  
Joseph Collins W9PYM  
Clarence O. Wahner W9YYY (alternate)  
Business Manager – Joe Collins W9PYM  
Contests – Doug Kluge W9NKK  
Legal Counsel Paul A Leeb W9TKY  
Membership - Clarence Burke W9KEU  
Technical - Louis Wollaeger W9ANA  
Programs - Clarence Burke W9KEU  
Public Relations – Aldrich Krones W9UIT  
Publicity - Fred Zolin W9ONY  
Roster - Leonard Benson W9BNN  
Chatter:  
Harry Paston W9DJV  
George Bowen W9DWI  
Fred Zolin W9ONY

**ARRL Section Communication Manager (SCM) –  
Reno Goetsch W9RQM**  
**AREC Milwaukee County Emergency Coordinator  
- Ralph Koenig W9RUF**  
**AREC Wisconsin Section Emergency Coordinator  
- Clarence O. Wahner W9YYY**  
**AREC Chief of Liaison – H. H. Devendorf**  
**ARRL Central Division Director - Jack Doyle  
W9GPI**

## 1950-1951

Pres - Fred Zolin W9ONY  
VP - Louis Wollaeger W9ANA  
Secretary - Eugene Wille W9EKU  
Secretary (9/28/50) - Les G. Thelander W9HDW  
Treasurer - Emil Felber W9RH  
Directors:  
Thomas Gettelman W9IZO  
George J. Pfister W9IZQ  
John Scarvaci W9GIL  
Gildea Hutchinson W9FTY  
Business Manager - H. Ellis Saxton W9UMX  
Chatter:  
Sid Rose W9VKC  
Jim Fischer W9LPF  
Mobile Wing – H. Charles Kaetel W9SNK  
**ARRL Central Division Director - Jack Doyle  
W9GPI**

## 1951-1952

Pres - Fred Zolin W9ONY  
1st VP - J. Travis Baird W9VQD  
2nd VP - Ken Eggert W9MOT  
Secretary - Art Brown W9EZP  
Treasurer - Lynn Lewis W9UH  
Treasurer (2/21/52) - Emil Felber W9RH  
Directors:  
H. Charles Kaetel W9SNK  
Jack Doyle W9GPI  
Emil Felber W9RH  
Thomas Gettelman W9IZO  
Douglas Pavek W9FDX  
Louis Wollaeger W9ANA  
Field Day Chairman - J. Travis Baird W9VQD  
**ARRL Central Division Director - Jack Doyle  
W9GPI**

## 1952-1953

Pres - Thomas Gettelman W9IZO  
1st VP - Ken Eggert W9MOT  
2nd VP - Carroll Thomas W9WK  
Secretary - Will Herzog W9LSK  
Treasurer - Eldon J. Belanger W9MDG  
Directors:  
J. Travis Baird W9VQD  
James K. Douglas W9DR  
Jack Doyle W9GPI  
Emil Felber W9RH  
Raymond A. Thompson W9IRZ  
Louis Wollaeger W9ANA  
Chairman - Fred Zolin W9ONY  
Field Day – Doug Pavek W9FDX  
Legal Counsel Paul A Leeb W9TKY  
**Women's Auxiliary Officers:**  
Pres - Mrs. Leanore Zavadnik  
1st VP - Mrs. Mary Meyer  
2nd VP - Mrs. Jeanne Pavek W9OMZ  
Secretary - Mrs. Louise Kaetel  
Treasurer - Mrs. Anita Thomas

### 1953-1954

Pres - Ken Eggert W9MOT  
1st VP - Frank Seeboth W9NLY  
2nd VP - Carroll Thomas W9WK  
Secretary - Will Herzog W9LSK  
Treasurer - Eldon J. Belanger W9MDG

#### Directors:

J. Travis Baird W9VQD  
Charles C. Dawson W9CUW  
James K. Douglas W9DR  
Emil Felber W9RH  
H. Charles Kaetel W9SNK  
Raymond A. Thompson W9IRZ  
Chairman - Fred Zolin W9ONY  
Legal Counsel Paul A Leeb W9TKY

#### Women's Auxiliary Officers:

Pres - Mrs. Mary Meyer  
1st VP - Mrs. Jeanne Pavek W9OMZ  
2nd VP - Mrs. Louise Kaetel  
Secretary - Mrs. Pauline Herzog  
Treasurer - Mrs. Evelyn Dawson

### 1954-1955

Pres - Eldon J. Belanger W9MDG  
1st VP - Frank Seeboth W9NLY  
2nd VP - Eugene Wille W9EKU  
Secretary - Edward Buchholz W9VBZ  
Treasurer - Roman Hudzinski W9JPS

#### Directors:

Ken Eggert W9MOT  
Charles C. Dawson W9CUW  
James K. Douglas W9DR  
Emil Felber W9RH  
Will Herzog W9LSK  
H. Charles Kaetel W9SNK  
Chairman - Fred Zolin W9ONY  
Legal Counsel Paul A Leeb W9TKY

#### Women's Auxiliary Officers:

Pres - Mrs. Evelyn Dawson  
1st VP - Mrs. Florence Belanger W9WYJ  
2nd VP - Mrs. Irene Buchholz  
Secretary - Mrs. Betty Eannelli  
Treasurer - Mrs. Marian Schweda

### 1955-1956

Pres - Emil Felber W9RH  
1st VP - Ken Eggert W9MOT  
2nd VP - Ray Peschek W9LJU  
Secretary - Vernon Fabishak W9HDH  
Treasurer - Charles C. Dawson W9CUW

#### Directors:

Eldon J. Belanger W9MDG  
Edward Buchholz W9VBZ  
Gordon J. Fedder W9YFW  
Will Herzog W9LSK  
Douglas A. Pavek W9FDX  
Dr. Irwin J. Waldman W9RXS  
Chairman - Fred Zolin W9ONY  
Legal Counsel Paul A Leeb W9TKY  
Field Day - Edward Buchholz W9VBZ

Mobile Chairman – Charles Dawson W9CUW

#### Women's Auxiliary Officers:

Pres - Mrs. Evelyn Dawson  
1st VP - Mrs. Florence Belanger W9WYJ  
2nd VP - Mrs. Irene Buchholz  
Secretary - Mrs. Betty Eannelli  
Treasurer - Mrs. Marian Schweda

### 1956-1957

Pres - Raymond Peschek W9LJU  
1st VP - Richard H. Oberholtzer W9ZPV  
2nd VP - Ray Peschek W9LJU  
Secretary - Vernon Fabishak W9HDH  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Emil Felber W9RH

#### Directors:

Eldon J. Belanger W9MDG  
Edward Buchholz W9VBZ  
Gordon J. Fedder W9YFW  
Will Herzog W9LSK  
Douglas A. Pavek W9FDX  
Dr. Irwin J. Waldman W9RXS  
Legal Counsel Paul A Leeb W9TKY  
Mobile Chairman – Gordon Fedder W9YFW  
Newsletter – Jack Hughes W9ULA

#### Women's Auxiliary Officers:

Pres - Mrs. Evelyn Dawson  
1st VP - Mrs. Florence Belanger W9WYJ  
2nd VP - Mrs. Irene Buchholz  
Secretary - Mrs. Betty Eannelli  
Treasurer - Mrs. Marian Schweda

## 1957-1958

Pres - Raymond Peschek W9LJU  
1st VP - Richard H. Oberholtzer W9ZPV  
2nd VP – Sigmund J. Wysocki W9DOS  
Secretary - Vernon Fabishak W9HDH  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Emil Felber W9RH

### Directors:

Eldon J. Belanger W9MDG  
Gordon J. Fedder W9YFW  
Douglas A. Pavek W9FDX  
Dr. Irwin J. Waldman W9RXS  
Legal Counsel Paul A Leeb W9TKY

**ARRL Central Division Director - Jack Doyle  
W9GPI**

### Women's Auxiliary Officers:

Pres - Mrs. Evelyn Dawson  
1st VP - Mrs. Florence Belanger W9WYJ  
2nd VP - Mrs. Irene Buchholz  
Secretary - Mrs. Betty Eannelli  
Treasurer - Mrs. Marian Schweda

## 1958-1959

Pres - Richard H. Oberholtzer W9ZPV  
1st VP - Clarence Crapo W9VD  
2nd VP – Sigmund Wysocki W9DOS  
2nd VP – Douglas A. Pavek W9FDX  
Secretary – James Buth K9CJK  
Treasurer - Charles C. Dawson W9CUW  
Chairman -

### Directors:

Eldon J. Belanger W9MDG  
Ken Eggert W9MOT  
Gordon J. Fedder W9YFW  
Fred Zolin W9ONY  
Legal Counsel Paul A Leeb W9TKY  
Bylaws Chairman - Ken Eggert W9MOT  
Public Relations, Publicity, and Editorial  
Communications:

Fred Zolin W9ONY  
Sid Rose W9VKC  
Larry Zentgraf K9CAG  
DX and ARRL Activities:  
Fred Borchardt W9DYG  
George Zurbuchen W9UDK  
John Coleman W9HAT  
Doug Pavek W9FDX

### Mobile Activities:

Gordon Fedder W9YFW  
Richard Sandborn W9FTE  
John Coleman W9HAT  
Don Drengenberg W9PST  
Field Day – Richard Scarvaci K9CAN

### Chatter:

Fred Zolin W9ONY  
Jim Buth K9CJK

**ARRL Central Division Director - Jack Doyle  
W9GPI**

### Women's Auxiliary Officers:

Pres - Mrs. Eve Koehler  
1st VP - Mrs. Florence Zolin  
2nd VP - Mrs. Kay Seboth  
Secretary - Mrs. Ruth Fedder  
Treasurer - Mrs. Betty Buth

## 1959-1960

Pres - Ken Eggert W9MOT  
1st VP - Arlan Bowen W9QYW  
2nd VP – Russell E. Burss W9RKP  
Secretary – Charles Porch K9ENB  
Treasurer – Donald Gross W9KQD  
Chairman - Douglas A. Pavek W9FDX  
Directors:  
J. Travis Baird W9VQD  
James Buth K9CJK  
Richard H. Oberholtzer W9ZPV  
Ray Peschek W9LJU  
Sigmund Wysocki W9DOS  
Fred Zolin W9ONY  
Legal Counsel Paul A Leeb W9TKY  
License Trustee – Thomas Gettelman W9IZO  
Field Day – Charles Porch K9ENB  
DX Committee:  
James E. Buth K9CJK  
Jack Kunath W9OMY  
TVI Committee – Ken Reger  
Radio Officer – Ralph Koenig W9RUF  
License Classes:  
Jack Doyle W9GPI  
Arlan Bowen W9QYW  
**ARRL Central Division Director - Jack Doyle  
W9GPI**

### **Women's Auxiliary Officers:**

Pres - Mrs. Jeanne Pavek W9OMZ  
1st VP - Mrs. Florence Belanger W9WYJ  
2nd VP - Mrs. Mary Meyer  
Secretary - Mrs. Lois Borchardt  
Treasurer - Mrs. Anita Thomas

## 1960-1961

Pres - Arlan Bowen W9QYW  
1st VP – Eugene Strzyzewski W9ZAN  
2nd VP – Donald J. Gross W9KQD  
Secretary – Russell C. Greenwood W9LVR  
Treasurer – Erwin Reiser K9CUI  
Chairman - Ken Eggert W9MOT  
Directors:  
J. Travis Baird W9VQD  
Fred Borchardt W9DYG  
James E. Buth K9CJK  
John Halser K9MTM  
Jack Hughes W9ULA  
Sigmund Wysocki W9DOS  
Legal Counsel Paul A Leeb W9TKY  
Radio Officer - Bob Goldstein K9KJT  
TVI Committee – Ed Bucholz W9VBZ  
Chatter – Russ Burss W9RKP  
License Trustee – Thomas Gettelman W9IZO  
**ARRL Central Division Director - Jack Doyle  
W9GPI**  
**Women's Auxiliary Officers:**  
Pres - Mrs. Florence Belanger W9WYJ  
1st VP – Mrs. Anita Thomas  
Secretary – Mrs. Evelyn Dawson  
Treasurer – Mrs. Marilyn Reger

## 1961-1962

Pres - Russell E. Burss W9RKP  
1st VP – J. Travis Baird W9VQD  
2nd VP – Russell C. Greenwood W9LVR  
Secretary – John Czarnecki Jr. K9PSU  
Treasurer – Gerald Kraig K9MZJ  
Chairman - Arlan Bowen W9QYW  
Directors:  
Fred Borchardt W9DYG  
Charles C. Dawson W9CUW  
John Halser K9MTM  
Fred Krause W9VLK  
Patrick Shanahan W9UNJ  
Bob Wilson W9ZB  
Legal Counsel Paul A Leeb W9TKY  
TVI Committee - John Halser K9MTM  
Field Day – Art Vahovius W9VSO  
Chatter:  
Fred Borchardt W9DYG  
James Buth K9CJK  
Don Gross W9KQD  
Russ Burss W9RKP  
License Trustee – Thomas Gettelman W9IZO  
**ARRL Central Division Director - Jack Doyle W9GPI**  
**ARRL Central Division Assistant Director (Wisconsin Section):**  
**Tom Gettelman W9IZO**  
**Reno Goetsch W9RQM**  
**John Scarvaci W9GIL**  
**Ross Hansch W9RBI**  
**Bud Woida W9KQB**  
**AREC EC – Bob Goldstein K9KJT**  
**RACES Radio Officer – Ralph Koenig W9RUF**  
**Wisconsin Section Communications Manager – Bud Woida W9KQB**  
**Women’s Auxiliary Officers:**  
Pres – Ellen Porch  
VP – Evelyn Dawson  
Secretary Irene Buchholz  
Treasurer – Anita Thomas

## 1962-1963

Pres - J. Travis Baird W9VQD  
1st VP - Royal Miller W9CJO  
2nd VP - Carl Rohde W9ROM  
Secretary - John Korn K9WGN  
Secretary - Bernard Moores K9KLM  
Treasurer - Tony Kuntz K9CJP  
Chairman - Russell E. Burss W9RKP  
Directors:  
Arlan Bowen W9QYW  
John Czarnecki K9SUB  
Charles C. Dawson W9CUW  
Don Street W9KJW  
Lowell Warshawsky W9NGV  
Robert Wilson W9ZB  
License Trustee – Emil Felber W9RH  
**ARRL Central Division Director - Jack Doyle W9GPI**  
**AREC EC – Bob Goldstein K9KJT**  
**RACES Radio Officer – Ralph Koenig W9RUF**

## 1963-1964

Pres - Royal Miller W9CJO  
1st VP - Carl Rohde W9ROM  
2nd VP - Walter Prichard W9CUS  
Secretary - Bernard Moores K9KLM  
Treasurer - Tony Kuntz K9CJP  
Chairman - J. Travis Baird W9VQD  
Directors:  
Arlan Bowen W9QYW  
Russell E. Burss W9RKP  
Paul A Leeb W9TKY  
Donald Street W9KJW  
William Thompson K9JGT  
Lowell Warshawsky W9NGV  
Custodian – Emil Felber W9RH  
License Trustee – Emil Felber W9RH  
Legal Counsel Paul A Leeb W9TKY  
**AREC EC – Bob Goldstein K9KJT**  
**RACES Radio Officer – Ralph Koenig W9RUF**

## 1964-1965

Pres - Carl Rohde W9ROM  
1st VP - Jack Doyle W9GPI  
2nd VP - Bernard Moores K9KLM  
Secretary - George Greeson K9KLLK  
Assistant Sec – Harold Engelke K9CMX  
Treasurer - Dick Scarvaci K9CAN  
Chairman - Royal Miller W9CJO  
Directors:  
Russell E. Burss W9RKP  
Charles C. Dawson W9CUW  
William Fake W9BLQ  
Frank Seebth W9NLY  
Lowell Warshawsky W9NGV  
Fred Zolin W9ONY  
License Trustee – Emil Felber W9RH  
Legal Counsel Paul A Leeb W9TKY  
Chatter:  
Fred Zolin W9ONY  
Jack Doyle W9GPI  
**Wisconsin Section Emergency Coordinator –  
Bernie Tower K9VPP  
AREC EC – Bob Goldstein K9KJT  
Radio Officer – Ralph Koenig W9RUF**

## 1965-1966

Pres - Carl Rohde W9ROM  
1st VP - Jack Doyle W9GPI  
2nd VP - Robert W. Price WA9JLU  
Secretary - Lowell Warshawsky W9NGV  
Treasurer - Jack W. McLeland W9ATK  
Chairman - Carl Rohde W9ROM  
Directors:  
Charles C. Dawson W9CUW  
William J. Fake W9BLQ  
Harold A. Engelke K9CMX  
Russell C. Greenwood W9LVR  
Frank J. Seboth W9NLY  
Fred H. Zolin W9ONY  
License Trustee - Emil Felber W9RH  
Field Day - Russell C. Greenwood W9LVR  
Legal Counsel - Paul A Leeb W9TKY  
Membership – Bob W9KLM  
Chatter:  
Fred H. Zolin W9ONY  
Arlan Bowen W9QYW  
Jack Doyle W9GPI  
Bob Goldstein K9KJT  
**Wisconsin Section Emergency Coordinator -  
Bernard E. Tower K9ZPP  
AREC EC – Bob Goldstein K9KJT  
Radio Officer - Herbert Zwarra W9MQA**

## 1966-1967

Pres - Bernard E. Tower K9ZPP (resigned 1/20/67)  
1st VP – Tom Hamilton K9WIG (resigned 10/6/66)  
1st VP - Donald A. Evenson K9JYX  
2nd VP - Robert W. Price WA9JLU  
Secretary - George Greeson K9KLLK  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Carl Rohde W9ROM  
Directors:  
Jack Doyle W9GPI  
Harold A. Engelke K9CMX  
Russell C. Greenwood W9LVR  
Jack W. McLeland W9ATK  
James H. Ott W9LCD  
Frank J. Seboth W9NLY  
Legal Counsel Paul A Leeb W9TKY  
Field Day – Don Evenson K9JYX  
License Trustee – Frank Seebth W9NLY  
License Trustee – Carl Rohde W9ROM (7/66)  
Auction - J. Travis Baird W9VQD  
Chatter:  
Jack Doyle W9GPI  
Bob Goldstein K9KJT  
Carl Rohde W9ROM  
Bob Price WA9JLU  
Ted Willet W9NHE  
Custodian - Carl Rohde W9ROM  
**AREC EC – Bob Goldstein K9KJT  
Radio Officer - Herbert Zwarra W9MQA**

## 1967 Central Division Convention

Chairman - Bernard E. Tower K9ZPP  
Vice Chairman - Jack Doyle W9GPI  
Program Chairman – Lynn Tamblin WA9KRF  
Ham Relations Chairman – Don Evenson K9JYX  
Financial Chairman – Paul Krueger WA9OQZ

## 1967-1968

Pres - J. Travis Baird W9VQD  
1st VP - Frank J. Seboth W9NLY  
2nd VP - Lowell Warshawsky W9NGV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Bernard E. Tower K9ZPP  
Directors:  
Jack Doyle W9GPI  
Donald A. Evenson K9JYX  
Jack W. McLeland W9ATK  
James H. Ott W9LCD  
Carl Rohde W9ROM  
Raymond W. Weeks WA9JOV  
Radio Officer - Herbert Zwarra W9MQA  
Custodian - Carl Rohde W9ROM  
Historian - Carl Rohde W9ROM  
Auction - J. Travis Baird W9VQD  
Field Day – Bob Stuckert WA9SYD  
Legal Counsel Paul A Leeb W9TKY  
Chatter:  
Jack Doyle W9GPI  
Bob Goldstein K9KJT  
Carl Rohde W9ROM  
Bob Price WA9JLU  
Ted Willet W9NHE  
**AREC EC – Bob Goldstein K9KJT**

## 1968-1969

Pres - J. Travis Baird W9VQD  
1st VP - Frank J. Seboth W9NLY  
2nd VP - Lowell Warshawsky W9NGV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Bernard E. Tower K9ZPP  
Directors:  
Donald A. Evenson K9JYX  
Jack W. McLeland W9ATK  
James H. Ott W9LCD  
Carl Rohde W9ROM  
Robert Stuckert WA9SYD  
Raymond W. Weeks WA9JOV  
Radio Officer - Herbert Zwarra W9MQA  
Custodian - Carl Rohde W9ROM  
Historian - Carl Rohde W9ROM  
Auction - J. Travis Baird W9VQD  
Legal Counsel Paul A Leeb W9TKY  
On Air Code Practice:  
Walter J. Glish W9YYW  
Robert Stuckert WA9SYD  
Raymond W. Weeks WA9JOV  
Chatter:  
Bob Goldstein K9KJT  
Carl Rohde W9ROM  
Bob Price WA9JLU  
Ted Willet W9NHE  
**AREC EC – Bob Goldstein K9KJT**

## 1969-1970

Pres - Richard H. Oberholtzer W9ZPV  
VP - Raymond W. Weeks WA9JOV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - J. Travis Baird W9VQD  
Directors:  
Harold A. Engelke K9CMX  
Jack W. McLeland W9ATK  
James H. Ott W9LCD  
Carl Rohde W9ROM  
Chester Y. Sakura W9CTI  
Lloyd W. Wantland WA9JKD  
Auction - J. Travis Baird W9VQD  
Historian - Carl Rohde W9ROM  
Legal Counsel - Paul A Leeb W9TKY  
Chatter - Chester Y. Sakura W9CTI  
**AREC EC – Bob Goldstein K9KJT**

### **1970-1971**

Pres - Richard H. Oberholtzer W9ZPV  
1<sup>st</sup> VP - James H. Ott W9LCD  
2<sup>nd</sup> VP - Raymond W. Weeks WA9JOV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - J. Travis Baird W9VQD  
Directors:  
Harold A. Engelke K9CMX  
Emmett Koeble K9DD  
John Hopwood W9KYT  
Jack W. McLeland W9ATK  
Chester Y. Sakura W9CTI  
Lloyd W. Wantland WA9JKD  
Auction - J. Travis Baird W9VQD  
Historian - Carl Rohde W9ROM  
Legal Counsel - Paul A Leeb W9TKY  
Chatter - Chester Y. Sakura W9CTI  
**AREC EC – Bob Goldstein K9KJT**

### **1971-1972**

Pres - Richard H. Oberholtzer W9ZPV  
1<sup>st</sup> VP - James H. Ott W9LCD  
2<sup>nd</sup> VP - Raymond W. Weeks WA9JOV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - J. Travis Baird W9VQD  
Directors:  
Harold A. Engelke K9CMX  
Emmett Koeble K9DD  
John Hopwood W9KYT  
Jack W. McLeland W9ATK  
Chester Y. Sakura W9CTI  
Lloyd W. Wantland WA9JKD  
Auction - J. Travis Baird W9VQD  
Historian - Carl Rohde W9ROM  
Legal Counsel - Paul A Leeb W9TKY  
Chatter - Chester Y. Sakura W9CTI  
License Trustee – Frank Seboth W9NLY  
**AREC EC – Bob Goldstein K9KJT**

### **1972-1973**

Pres - Jack W. McLeland W9ATK  
1<sup>st</sup> VP – Jim Taylor K9ZYS  
2<sup>nd</sup> VP - Dave DeFebo WB9BWP  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Richard H. Oberholtzer W9ZPV  
Directors:  
Russell E. Burss W9RKP  
Harold A. Engelke K9CMX  
David J. Knaus WA9POV  
George Ruger WN9EHA  
Chester Y. Sakura W9CTI  
Lloyd W. Wantland WA9JKD  
Auction - J. Travis Baird W9VQD  
Chatter - Chester Y. Sakura W9CTI  
License Trustee – Frank Seboth W9NLY  
**AREC EC – Dave Knaus WA9POV**

### **1973-1974**

Pres – Jack W. McLeland W9ATK  
1<sup>st</sup> VP – Emmett H. Koeble K9DD  
2<sup>nd</sup> VP – David J. Knaus WA9POV  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Richard H. Oberholtzer W9ZPV  
Directors:  
Russell E. Burss W9RKP  
Dave DeFebo WB9BWP  
George Ruger W9DVD  
Chester Y. Sakura W9CTI  
Ray O. Truemner W9ITD  
William V. Witt Jr. W9LUR  
Auction - J. Travis Baird W9VQD  
Chatter - Chester Y. Sakura W9CTI  
License Trustee – Frank Seboth W9NLY  
**AREC EC – Dave Knaus WA9POV**

### **1974-1975**

Pres – Lee Mushel K9WRU  
1<sup>st</sup> VP – Emmett H. Koeble K9DD  
2<sup>nd</sup> VP – Howard Traxler WA9RYF  
Secretary - Walter J. Glish W9YYW  
Treasurer - Charles C. Dawson W9CUW  
Chairman - Jack W. McLeland W9ATK  
Directors:  
David J. Knaus WA9POV  
Richard H. Oberholtzer W9ZPV  
Ralph Parker WA9MLY  
Chester Y. Sakura W9CTI  
Ray O. Truemner W9ITD  
Gordon H. Weiler W9ZQK  
Auction - J. Travis Baird W9VQD  
Chatter - Chester Y. Sakura W9CTI  
License Trustee – Frank Seboth W9NLY

**1975-1976**

Pres - Eldon J. Belanger W9MDG  
 1st VP - Gordon H. Weiler W9ZQK  
 2nd VP - Ralph Parker WA9MLY  
 Secretary - Ray O. Truemner W9ITD  
 Treasurer - J. Travis Baird W9VQD  
 Chairman - Jack W. McLeland W9ATK  
 Directors:  
 Florence Belanger W9WYJ  
 Russell E. Burss W9RKP  
 Walter J. Glish W9YYW  
 Robert A. Glamm W9UGN  
 Jack C. Krause W9UJM  
 Sus Musashi WB9BGJ  
 Picnic – Ralph Parker WA9MLY  
 Auction - J. Travis Baird W9VQD  
 License Trustee – Frank Seboth W9NLY

**1976-1977**

Pres - Robert A. Glamm W9UGN  
 1st VP - Gordon H. Weiler W9ZQK  
 2nd VP - Ralph Parker WA9MLY  
 Secretary - Jack C. Krause W9JK  
 Treasurer - David DeFebo WB9BWP  
 Chairman - Eldon J. Belanger W9MDG  
 Directors:  
 Florence Belanger W9WYJ  
 Russell E. Burss W9RKP  
 Walter J. Glish W9YYW  
 Sus Musashi WB9BGJ  
 Richard H. Oberholtzer W9ZPV  
 Howard Traxler WA9RYF  
 Auction - J. Travis Baird W9VQD  
 Field Day - Howard Traxler WA9RYF  
 License Classes - Richard H. Oberholtzer W9ZPV  
 Class Instructors:  
 Richard H. Oberholtzer W9ZPV  
 Dave DeFebo WB9BWP  
 Walter J. Glish W9YYW

**1977-1978**

Pres - Robert A. Glamm W9UGN  
 1st VP -  
 2nd VP – Steve Schwednetter WB9ZKT  
 Secretary - Jack C. Krause W9JK  
 Treasurer - David DeFebo WB9BWP  
 Chairman - Eldon J. Belanger W9MDG  
 Directors:  
 Russell E. Burss W9RKP  
 Walter J. Glish W9YYW  
 Glenn Rearick WD9GZM  
 Business Manager - H. Charles Kaetel W9SNK  
 Auction - J. Travis Baird W9VQD  
 Field Day - Howard Traxler WA9RYF  
 License Classes - Richard H. Oberholtzer W9ZPV  
 Class Instructors:  
 Richard H. Oberholtzer W9ZPV  
 Dave DeFebo WB9BWP  
 Walter J. Glish W9YYW  
 Chris Welton WD9GZL

**1978-1979**

Pres - Robert A. Glamm W9UGN  
 1st VP - Chris Welton WD9GZL  
 C. Reid Whipple K9IWC  
 2nd VP – Steve Schwednetter WB9ZKT  
 Secretary - Jack C. Krause W9JK  
 Treasurer - David DeFebo WB9BWP  
 Chairman - Eldon J. Belanger W9MDG  
 Directors:  
 Florence Belanger W9WYJ  
 Russell E. Burss W9RKP  
 Walter J. Glish W9YYW  
 Richard H. Oberholtzer W9ZPV  
 Glenn Rearick WD9GZM  
 Howard Traxler WA9RYF  
 Business Manager - H. Charles Kaetel W9SNK  
 Auction - J. Travis Baird W9VQD  
 Field Day - C. Reid Whipple K9IWC  
 License Classes - Richard H. Oberholtzer W9ZPV  
 Class Instructors:  
 Richard H. Oberholtzer W9ZPV  
 Dave DeFebo WB9BWP  
 Walter J. Glish W9YYW

## 1979-1980

Pres - Robert A. Glamm W9UGN - resigned  
Pres - C. Reid Whipple K9IWC  
1st VP - C. Reid Whipple K9IWC  
1st VP - David DeFebo WB9BWP  
2nd VP - Steven Schwendtner WB9ZKT  
Secretary - Jack Krause W9JK  
Treasurer - David DeFebo WB9BWP (became VP)  
Treasurer - Chris Welton WD9GZL  
Chairman - Eldon J. Belanger W9MDG  
Directors:  
Russell E. Burss W9RKP (removed)  
Florence Belanger W9WYJ  
Walter J. Glish W9YYW  
Richard H. Oberholtzer W9ZPV  
Glen Rearick WD9GZM (resigned 11/79)  
Howard Traxler WA9RYF  
Business Manager - H. Charles Kaetel W9SNK  
Sgt at Arms - Dick McNew WB9PTC  
Auction - J. Travis Baird W9VQD  
Field Day - C. Reid Whipple K9IWC  
License Classes - H. Charles Kaetel W9SNK  
Class Instructors:  
Eldon J. Belanger W9MDG  
Dave DeFebo WB9BWP  
Walter J. Glish W9YYW  
C. Reid Whipple K9IWC

## 1980-1981

Pres - C. Reid Whipple K9IWC  
1st VP - David DeFebo WB9BWP  
2nd VP – Ken Eggert W9MOT  
Secretary - Jack Krause W9JK  
Treasurer - Ted Stiller WA9RDI  
Chairman - Eldon J. Belanger W9MDG  
(resigned/retired)  
Directors:  
Florence Belanger W9WYJ (resigned/retired)  
Walter J. Glish W9YYW  
Richard H. Oberholtzer W9ZPV  
Glen Rearick WD9GZM  
Howard Traxler WA9RYF  
Business Manager - H. Charles Kaetel W9SNK  
Auction - J. Travis Baird W9VQD  
Field Day – Mark Brueggermann KA9LXP  
License Classes - H. Charles Kaetel W9SNK  
Class Instructors:  
Eldon J. Belanger W9MDG  
Dave DeFebo WB9BWP  
Walter J. Glish W9YYW  
John E. Lorbiecki KA9DNL  
Vern Petersen W9PGL

## 1982-1983

Pres - Dave DeFebo WB9BWP  
1st VP - Ken Eggert W9MOT  
2nd VP - Vern Petersen W9PGL  
Secretary - Jack Krause W9JK  
Treasurer - Ted Stiller WA9RDI  
Chairman - C. Reid Whipple K9IWC  
Directors:  
Walter J. Glish W9YYW  
Fred Mikolajewski WD9IYA  
Duane K. Mitchell WD9HBZ (replaced Ed Vetter - moved)  
Ottmar W. Noeske W9LGO  
Marvin H. Rutishauser WB9PKL  
Betty Vetter N9APE  
Ed Vetter N9ARC  
Christopher Welton WD9GZL (replaced Betty Vetter - moved)  
Business Manager - H. Charles Kaetel W9SNK  
Mailing List/Membership – Lillian Wunsch WA9EMJ  
Auction - J. Travis Baird W9VQD  
Field Day - Mark Brueggeman KA9LXP  
License Classes - H. Charles Kaetel W9SNK  
Class Instructors:  
Dave DeFebo WB9BWP  
Walter J. Glish W9YYW  
Bill Fulhart KA9GVX  
John E. Lorbiecki KA9DNL  
Vern Petersen W9PGL

## 1983-1984

Pres - Dave DeFebo WB9BWP  
1st VP - John E. Lorbiecki KA9DNL  
2nd VP - Vern Petersen W9PGL  
Secretary - Ken Eggert W9MOT  
Treasurer - Pat Hoppe KA9OIZ  
Chairman - C. Reid Whipple K9IWC  
Directors:  
Walter J. Glish W9YYW  
Jerry Melotik KC9EV  
Fred Mikolajewski WD9IYA  
Duane K. Mitchell WD9HBZ  
Ted Stiller WA9RDI  
Christopher Welton WD9GZL  
Business Manager - H. Charles Kaetel W9SNK  
Auction - J. Travis Baird W9VQD  
Field Day - Pat Hoppe KA9OIZ  
License Classes - H. Charles Kaetel W9SNK  
Class Instructors:  
Dave DeFebo WB9BWP  
Bill Fulhart KA9GVX  
Walter J. Glish W9YYW  
John Lorbiecki K9WUF  
John E. Lorbiecki KA9DNL  
Vern Petersen W9PGL

## 1984-1985

Pres - Christopher Welton WD9GZL  
1st VP - John E. Lorbiecki KA9DNL  
2nd VP - Emerend Bude K9HJH  
Secretary - Harry Cieszki KD9AJ  
Treasurer - Montgomery Sykes KA9NVY  
Chairman - Dave DeFebo WB9BWP  
Business Manager - H. Charles Kaetel W9SNK  
Directors:  
Jack Krause W9JK  
Fred Mikolajewski KC9WW  
George Philbert KA9MXM  
Auction - J. Travis Baird W9VQD  
Field Day:  
Pat Hoppe KA9OIZ  
Ted Stiller WA9RDI  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Harry Cieszki KD9AJ  
Dave DeFebo WB9BWP  
Walter J. Glish W9YYW  
John Lorbiecki K9WUF  
John E. Lorbiecki KA9DNL  
Vern Petersen W9PGL  
VEC - Jack Krause W9JK

## 1985-1986

Pres - Ted Stiller WA9RDI  
1st VP - Bill Witt N9KY  
2nd VP - Emerend Bude K9HJH  
Secretary - Harry Cieszki KD9AJ  
Treasurer - C. Reid Whipple K9IWC  
Chairman - C. Reid Whipple K9IWC  
Directors:  
Walter J. Glish W9YYW  
Jack Krause W9JK  
Jerry Melotik KC9EV  
Fred Mikolajewski WD9IYA  
George Philbert KA9MXM  
Jerry Reidel KA9AJF  
Sgt At Arms - Dick McNew WB9PTC  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Harry Cieszki KD9AJ  
Dave DeFebo WB9BWP  
John Lorbiecki K9WUF  
Terry Kohler KA9RFM  
Ed Seruga KE9JJ  
Auction - J. Travis Baird W9VQD  
Field Day:  
Jerry Reidel KA9AJF  
Jerry Melotik KC9EV  
VEC - Jack Krause W9JK  
Archive Custodian - Fred Mikolajewski WD9IYA  
Legal Counsel - Bob Fenning

## 1986-1987

Pres - Ted Stiller WA9RDI  
1st VP - Emerend Bude K9HJH  
2nd VP -  
Secretary - Chris Welton WD9GZL  
Secretary - Harry Cieszki KD9AJ  
Treasurer - C. Reid Whipple K9IWC  
Treasurer - Fr. William Kidd NE9W  
Chairman - C. Reid Whipple K9IWC  
Directors (?):  
J. Travis Baird W9VQD  
Jack Krause W9JK  
Jerry Melotik KC9EV  
George Philbert KA9MXM  
Jerry Reidel KA9AJF  
Richard Schlatterer KA9MTY  
Roger Zaun W9UVV  
Sgt at Arms - Dick McNew WB9PTC  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
John Lorbiecki K9WUF  
Terry Kohler KA9RFM  
Ed Seruga KE9JJ  
Auction - J. Travis Baird W9VQD  
Field Day:  
Jerry Reidel KA9AJF  
Jerry Melotik KC9EV  
VEC - Jack Krause W9JK  
Archive Custodian - Fred Mikolajewski WD9IYA  
Legal Counsel - Bob Fenning

## 1987-1988

Pres - Ted Stiller WA9RDI  
1st VP - Emerend Bude K9HJH  
2nd VP -  
Secretary - Chris Welton WD9GZL  
Treasurer - Fr. William Kidd NE9W  
Chairman - C. Reid Whipple K9IWC  
Directors (?):  
Jack Krause W9JK  
Jerry Melotik KC9EV  
George Philbert KA9MXM  
Jerry Reidel KA9AJF  
Richard Schlatterer KA9MTY  
Roger Zaun W9UVV  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
John Lorbiecki K9WUF  
Terry Kohler KA9RFM  
Ed Seruga KE9JJ  
Auction - J. Travis Baird W9VQD  
Field Day:  
Jerry Reidel KA9AJF  
Jerry Melotik KC9EV  
VEC - Jack Krause W9JK  
Archive Custodian - Fred Mikolajewski WD9IYA

## 1988-1989

Pres - Harry Cieszki KD9AJ  
1st VP - J. Travis Baird W9VQD  
2nd VP - Emerend Bude K9HJH  
Secretary - Ed Seruga KE9JJ  
Treasurer - Fr. William Kidd NE9W  
Chairman - Ted Stiller WA9RDI  
Directors:  
Jack Krause W9JK  
George Philbert KA9MXM  
Jerry Reidel KA9AJF  
Richard Schlatterer KA9MTY  
Ed Wille W9PWG  
Roger Zaun W9UVV  
License Classes:  
Harry Cieszki KD9AJ  
Fred Krause W9VLL  
Class Instructors:  
Dave DeFebo WB9BWP  
Vern Petersen W9PGL  
Ed Seruga KE9JJ  
Chatter - Harry Cieszki KD9AJ  
Auction - J. Travis Baird W9VQD  
Field Day - Jerry Reidel KA9AJF  
VEC - Jack Krause W9JK

## 1989-1990

Pres - Harry Cieszki KD9AJ  
1st VP - J. Travis Baird W9VQD  
2nd VP - Emerend Bude K9HJH  
Secretary - Ed Seruga KE9JJ  
Treasurer - Fr. William Kidd NE9W  
Chairman - Ted Stiller WA9RDI  
Directors:  
Jack Krause W9JK  
George Philbert KA9MXM  
Joe Rayome KE9LL  
Kelly Schafer N9HBN  
Richard Schlatterer KA9MTY  
Ed Wille W9PWG  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Chatter - Harry Cieszki KD9AJ  
PR - Kelly Schafer N9HBN  
Auction - J. Travis Baird W9VQD  
VEC - Jack Krause W9JK

## 1990-1991

Pres - Ed Wille W9PWG  
1st VP - J. Travis Baird W9VQD  
2nd VP - Fred Linn W9NZF  
Secretary - Ed Seruga KE9JJ  
Treasurer - Dean Kiefer KB9DNE  
Chairman - Ted Stiller WA9RDI  
Directors:  
Jack Krause W9JK  
Marv Rutishauser WB9PKL  
Kelly Schafer N9HBN  
Richard Schlatterer KA9MTY  
Roger Zaun W9UVV  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Joe Rayome KE9LL  
Chatter - Joe Rayome KE9LL  
Archive Custodian - Fred Mikolajewski WD9IYA  
VEC - Jack Krause W9JK  
**AREC EC Milw and Wauk Cty- John Leekley  
WB9SMM**

## 1991-1992

Pres - Ed Wille W9PWG  
1st VP - J. Travis Baird W9VQD  
2nd VP - Fred Linn W9NZF  
Secretary - Ed Seruga KE9JJ  
Treasurer - Dean Kiefer KB9DNE  
Chairman - Ted Stiller WA9RDI  
Directors:  
Paul Boese KB9FBM  
Jack Krause W9JK  
Joe Rayome KE9LL  
Marv Rutishauser WB9PKL  
Orv Stewart KA9ONQ  
Roger Zaun W9UVV  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Joe Rayome KE9LL  
Chatter:  
Joe Rayome KE9LL  
Orv Stewart KA9ONQ (mailing)  
Field Day:  
Tom Fuszard N9MGZ  
Ted Stiller WA9RDI  
VEC - Jack Krause W9JK  
Les Peterson W9YCV  
Archive Custodian - Fred Mikolajewski WD9IYA

### 1992-1993

Pres - Ed Wille W9PWG  
1st VP - J. Travis Baird W9VQD  
2nd VP - Roger Zaun W9UVV  
Secretary - Fred Linn W9NZF  
Treasurer - Dean Kiefer KB9DNE  
Treasurer - Orv Stewart KA9ONQ (10/92)  
Chairman - Ted Stiller WA9RDI  
Directors:  
Paul Boese KB9FBM  
Pancho Doneis KA9OFA (extra added by Ed Wille W9PWG)  
Tom Fuszard KF9PU  
Bill Jones KF9FA  
Kate Kedney KA9MWT  
Jack Krause W9JK  
Joe Rayome KE9LL  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Joe Rayome KE9LL  
Field Day:  
Tom Fuszard N9MGZ  
Archive Custodian - Fred Mikolajewski WD9IYA  
Chatter - Joe Rayome KE9LL  
VEC:  
Jack Krause W9JK  
Les Peterson W9YCV

### 1993-1994

Pres - Ed Wille W9PWG  
1st VP - J. Travis Baird W9VQD  
2nd VP - Roger Zaun W9UVV  
Secretary - Fred Linn W9NZF  
Treasurer - Orv Stewart KA9ONQ  
Chairman - Ted Stiller WA9RDI  
Directors:  
Paul Boese KB9FBM  
Pancho Doneis KA9OFA  
Tom Fuszard N9MGZ  
Bill Jones KF9FA  
Kate Kedney KA9MWT  
Jack Krause W9JK  
Joe Rayome KE9LL  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Vern Petersen W9PGL  
Jim Tromblay WB9LNU  
Ed Wille W9PWG  
Field Day:  
Jim Tromblay WB9LNU  
Wayne Schrubbe N9RXB  
Chatter - Pancho Doneis KA9OFA  
VEC:  
Jack Krause W9JK  
Les Peterson W9YCV  
Historian - Jim Tromblay WB9LNU

### 1995-1996

Pres - Ed Wille W9PWG  
1st VP - J. Travis Baird W9VQD (SK)  
2nd VP - Roger Zaun W9UVV  
Secretary - Fred Linn W9NZF  
Treasurer - Orv Stewart KA9ONQ  
Treasurer – Ken Eggert W9MOT (10/94)  
Directors:  
Pancho Doneis KA9OFA  
Dave DeFebo WB9BWP  
Ken Eggert W9MOT (became Treasurer)  
John Merkl WB9PSE (replaced W9MOT)  
Richard Schlatterer KA9MTY  
Jerry Thompson WA9SFH  
Jim Tromblay WB9LNU  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Jim Tromblay WB9LNU  
Field Day - Jim Tromblay WB9LNU  
Chatter - Pancho Doneis KA9OFA  
Chatter Mailings:  
Richard Schlatterer KA9MTY  
Jerry Thompson WA9SFH  
VEC:  
Jack Krause W9JK  
Les Peterson W9YCV  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
Jim Tromblay WB9LNU  
Ed Wille W9PWG  
Historian - Jim Tromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU  
Repeater – Jim Tromblay WB9LNU

### **1996-1997**

Pres - Ed Wille W9PWG  
1st VP - Dave DeFebo WB9BWP  
2nd VP - Kate Kedney KA9MWT  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Ken Eggert W9MOT  
Directors:  
Carlos Barron KG9FC  
Pancho Doneis KA9OFA  
Fred Linn W9NZF  
Richard Schlatterer KA9MTY  
Jerry Thompson WA9SFH  
Roger Zaun W9UVV  
Field Day:  
JimTromblay WB9LNU  
John Merkl WB9PSE  
VEC:  
Jack Krause W9JK  
Ed Wille W9PWG  
License Classes - Dave DeFebo WB9BWP  
Class Instructors:  
Dave DeFebo WB9BWP  
JimTromblay WB9LNU  
Ed Wille W9PWG  
Chatter - Pancho Doneis KA9OFA  
Roster and Member Database:  
Jerry Thompson WA9SFH  
Richard Schlatterer KA9MTY  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU

### **1997-1998**

Pres - Ed Wille W9PWG  
1st VP - Dave DeFebo WB9BWP  
2nd VP - Kate Kedney KA9MWT  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Ken Eggert W9MOT  
Directors:  
Carlos Barron KG9FC (resigned)  
Pancho Doneis KA9OFA  
Rick Kissell WB9GYT  
Fred Linn W9NZF  
Matt Planning KB9PRC  
Don Virlee KG9II (replaced KG9FC resigned)  
Roger Zaun W9UVV  
Field Day:  
Richard Schlatterer KA9MTY  
JimTromblay WB9LNU  
Repeater:  
Ed Wille W9PWG  
Jim Tromblay WB9LNU  
Chatter - Pancho Doneis KA9OFA  
VEC - Ed Wille W9PWG  
Raffle – Tom Sherlowsky N9UFJ  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU

### **1998-1999**

Pres - Dave DeFebo WB9BWP  
1st VP - Matt Planning KB9PRC  
2nd VP - Brian White KB9LCQ  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Ken Eggert W9MOT  
Directors:  
Mark Bye KB9LDX  
Pancho Doneis KA9OFA  
Al Drobac AA9XH  
Rick Kissell WB9GYT  
Dick McNew WB9PTC  
Jerry Melotik KC9EV  
Ed Wille W9PWG  
Chatter - Pancho Doneis KA9OFA  
Field Day:  
John Merkl WB9PSE  
Matt Planning KB9PRC  
VEC - Ed Wille W9PWG  
Raffle – Tom Sherlowsky N9UFJ  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU

### **1999-2000**

Pres - Dave DeFebo WB9BWP  
1st VP - Matt Planning KB9PRC  
2nd VP - Brian White KB9LCQ  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Ken Eggert W9MOT  
Directors:  
Barbara Brewer KB9TIV  
Pancho Doneis KA9OFA  
Al Drobac AA9XH  
Dick McNew WB9PTC  
Jerry Melotik KC9EV  
Tom Fuszard KF9PU  
Kate Kedney KA9MWT (replacing KC9EV SK)  
Field Day - Jerry Melotik KC9EV  
Christmas Party – Vern Teske W9RYA  
Chatter - Pancho Doneis KA9OFA  
Chatter Mailing:  
Barbara Brewer KB9TIV  
John Merkl WB9PSE  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Repeater – Jim Tromblay WB9LNU  
Raffle – Tom Sherlowsky N9UFJ  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU

## 2000-2001

Pres - Dave DeFebo WB9BWP  
1st VP - Matt Planning KB9PRC  
2nd VP - Brian White K9LCQ  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Lester Hundt KB9QZQ  
Directors:  
Barbara Brewer KB9TIV  
Pancho Doneis KA9OFA  
Ken Eggert W9MOT  
Tom Fuszard KF9PU  
Kate Kedney KA9MWT  
John Merkl WB9PSE (replaced AA9XH resigned)  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
License Classes - Ken Caruso KS4NX  
Class Instructors:  
Ken Caruso KS4NX  
Brian White K9LCQ  
Sherm Swanson KB9Q  
Barbara Brewer KB9TIV  
On Air Code Practice - Dick McNew WB9PTC  
Repeater:  
Matt Planning KB9PRC  
Dave DeFebo WB9BWP  
Field Day – Brian White K9LCQ  
Chatter - Pancho Doneis KA9OFA  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU

## 2001-2002

Pres - Dave DeFebo WB9BWP  
1st VP - Matt Planning KB9PRC  
2nd VP - Brian White K9LCQ  
Secretary - Jim Tromblay WB9LNU  
Treasurer - Lester Hundt KB9QZQ  
Directors:  
Pancho Doneis KA9OFA  
Ken Eggert W9MOT  
Tom Fuszard KF9PU  
Kate Kedney KA9MWT  
John Merkl WB9PSE  
Tom Schulte KB9RLB  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
Repeater:  
Matt Planning KB9PRC  
Dave DeFebo WB9BWP  
Mark Tellier AB9CD  
Repeater Advisor - Dave Karr KA9FUR  
License Classes - Ken Caruso KS4NX  
Class Instructors:  
Ken Caruso KS4NX  
Bill Lubitz W9EMC  
Brian White K9LCQ  
Barbara Brewer KB9TIV  
Field Day - Matt Planning KB9PRC  
Chatter - Pancho Doneis KA9OFA  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - JimTromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU  
Web Site - Howard Parks AB9FH

## 2002-2003

Pres - Patrick Moretti W9UQ  
VP - Mark Tellier AB9CD  
Secretary - Tom Schulte KB9RLB  
Treasurer - Lester Hundt AB9EY  
Directors:  
Pancho Doneis KA9OFA  
Tom Fuszard KF9PU  
John Merkl WB9PSE  
Brian White K9LCQ  
Chatter - Pancho Doneis KA9OFA  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
Repeater:  
Matt Planning KB9PRC  
Dave DeFebo WB9BWP  
Mark Tellier AB9CD  
Repeater Advisor - Dave Karr KA9FUR  
License Classes - Mark Tellier AB9CD  
Class Instructors:  
Patrick Moretti W9UQ  
Mark Tellier AB9CD  
Brian White K9LCQ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - Jim Tromblay WB9LNU  
License Trustee - Jim Tromblay WB9LNU  
Web Site - Howard Parks AB9FH  
85th Anniversary Special Event:  
Tom Schulte KB9RLB  
Brian White K9LCQ  
85th Anniversary Special Event Operators:  
Mark Bye KB9LDX  
Dave DeFebo WB9BWP  
Tom Fuszard KF9PU  
Tom Schulte KB9RLB  
Sherm Swanson KB9Q  
Mark Tellier AB9CD with Matt Planning KB9PRC

## 2003-2004

Pres:  
Patrick Moretti W9UQ resigned  
Kevin Reeme KC9BZU acting  
VP – Kevin Reeme KC9BZU  
Secretary - Tom Schulte KB9RLB  
Treasurer - Mark Tellier AB9CD (resigned November 2003)  
Joe Schwarz N9UX  
Directors:  
Pancho Doneis KA9OFA  
Tom Fuszard KF9PU  
John Merkl WB9PSE  
Jerry Wahlen WA9CGE  
Brian White K9LCQ  
Dick Wood W9JBE  
Chatter - Pancho Doneis KA9OFA  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
Dave Karr KA9FUR  
License Classes - Mark Tellier AB9CD  
Class Instructors:  
Patrick Moretti W9UQ  
Mark Tellier AB9CD  
Brian White K9LCQ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
License Trustee - Jim Tromblay WB9LNU  
Web Site - Howard Parks AB9FH

## 2004-2005

Pres - Patrick Moretti W9UQ  
VP - Howard Parks AB9FH  
Secretary - Brian White K9LCQ  
Treasurer - Tom Schulte KB9RLB  
Directors:  
Pancho Doneis KA9OFA  
Hal Newton KB9OZN  
Joe Sturmberg KA9DFZ  
Jerry Wahlen WA9CGE  
Dick Wood W9JBE  
Chatter - Pancho Doneis KA9OFA  
Chatter Email – Joe Schwarz N9UX  
Chatter Mailing – Dick Wood W9JBE  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
License Classes - Howard Parks AB9FH  
License Trustee - Jim Tromblay WB9LNU  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Brian White K9LCQ  
Jerry Wahlen WA9CGE  
Dave Karr KA9FUR  
Dave Schank KA9WXN  
FM Simplex Contest:  
Sherm Swanson KB9Q  
Mark Tellier AB9CD  
Field Day - Jerry Wahlen WA9CGE  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - Dave DeFebo WB9BWP  
Web Site - Howard Parks AB9FH  
**ARES DEC – Gary Payne N9VE**

## 2005-2006

Pres - Patrick Moretti W9UQ  
VP - Howard Parks AB9FH  
Secretary - Brian White K9LCQ  
Treasurer - Tom Schulte KB9RLB  
Directors:  
Pancho Doneis KA9OFA  
Hal Newton KB9OZN  
Joe Sturmberg KA9DFZ (resigned 9/05)  
Jerry Wahlen WA9CGE  
Dick Wood W9JBE  
Charles Grady KC9IIV (Jan 06-June 06)  
Chatter - Pancho Doneis KA9OFA  
Chatter Email – Joe Schwarz N9UX  
Chatter Mailing – Dick Wood W9JBE  
VEC:  
John Kraak KF9XL  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
Question Pool Interface: Dave DeFebo WB9BWP  
License Classes - Howard Parks AB9FH  
On Air Code Practice:  
Dick McNew WB9PTC  
Milan Levrich N9IDX  
“Buck” Buchwald K9RYW  
License Trustee - Jim Tromblay WB9LNU  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Brian White K9LCQ  
Jerry Wahlen WA9CGE  
Dave Karr KA9FUR  
Dave Schank KA9WXN  
FM Simplex Contest:  
Sherm Swanson KB9Q  
Mark Tellier AB9CD  
Field Day - Jerry Wahlen WA9CGE  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site - Howard Parks AB9FH  
**ARES DEC – Gary Payne N9VE**

## 2006-2007

Pres - Howard Parks AB9FH  
VP - Joe Schwarz, N9UX  
Secretary:  
Charles Grady KC9IIV (resigned)  
Sarah Parks KB9ZNC (1/07-)  
Treasurer:  
Sarah Parks KB9ZNC (6/06-12/06)  
Mark Tellier AB9CD (3/07-)  
Directors:  
Pancho Doneis KA9OFA  
Tom Liebe WI9TOM  
Ted Stiller WA9RDI  
Jerry Wahlen WA9CGE  
Dick Wood W9JBE  
Chatter - Pancho Doneis KA9OFA  
VEC:  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
License Classes - Howard Parks AB9FH  
On Air Code Practice:  
Dick McNew WB9PTC  
"Buck" Buchwald K9RYW  
Bob Immekus W9CYI  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Brian White K9LCQ  
Jerry Wahlen WA9CGE  
Dave Schank KA9WXN  
Dave Karr KA9FUR  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Sherm Swanson KB9Q  
Mark Tellier AB9CD  
Field Day:  
Pancho Doneis KA9OFA  
Jim Tromblay WB9LNU  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site - Howard Parks AB9FH  
**ARES DEC – Gary Payne N9VE**  
**ARES Milw Co. EC – Dan Workenaour N9ASA**

## 2007-2008

Pres - Howard Parks AB9FH  
VP - Joe Schwarz, N9UX  
Secretary:  
Sarah Parks KB9ZNC (1/07-)  
Treasurer:  
Howard Parks AB9FH (1/07-6/07)  
Mark Tellier AB9CD (6/07-)  
Directors:  
Brian Bieger KC9HEK  
Pancho Doneis KA9OFA  
Tom Liebe WI9TOM  
Al Maahs KC9IJJ  
Ted Stiller WA9RDI  
Chatter - Pancho Doneis KA9OFA  
VEC:  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
License Classes:  
Howard Parks AB9FH  
Mark Tellier AB9CD  
On Air Code/Theory Instruction:  
Dick McNew WB9PTC  
Peter Chiu KC9IJH  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Pancho Doneis KA9OFA  
Jim Tromblay WB9LNU  
Field Day Computer Operations: Larry Noldan NZ9I  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site – Brian White K9LCQ  
**ARES DEC – Gary Payne N9VE**  
**ARES Milw Co. EC – Dan Workenaour N9ASA**  
**Ken Hahn WK9H (11/07)**

## 2008-2009

Pres - Howard Parks AB9FH  
VP – Brian Bieger KC9HEK  
Secretary - Sarah Parks KB9ZNC  
Treasurer - Mark Tellier AB9CD  
Directors:  
Dave DeFebo WB9BWP  
Pancho Doneis KA9OFA (resigned 7/08)  
Bob Fetterly N9HWB (appointed 8/08, SK 9/08)  
Mike Harris KC9CMT (appointed 1/09)  
Al Maahs KC9IJJ  
Dave Schank KA9WXN (appointed 1/2009 till 2010)  
Ted Stiller WA9RDI (resigned 8/08)  
Brian White K9LCQ (1 yr term remaining of Brian Bieger who became VP)  
Chatter - Pancho Doneis KA9OFA (resigned (7/08)  
Brian White K9LCQ (1/2009-)  
VEC:  
Tom Fuszard KF9PU  
Tom Czaja KG9EE  
Mark Tellier AB9CD  
Larry Nolan NZ9I  
License Classes:  
Mark Tellier AB9CD  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Pancho Doneis KA9OFA  
Jim Tromblay WB9LNU  
Field Day Computer Operations: Larry Noldan NZ9I  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
ARES DEC – Gary Payne N9VE  
ARES Wi SEC - Gary Payne N9VE (1/1/09)  
ARES Milw Co. EC – Dan Workenaour N9ASA  
Ken Hahn WK9H (11/07-5/08)  
ARES Waukesha Co. EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site – Brian White K9LCQ

## 2009-2010

Pres - Howard Parks AB9FH (resigned 3/09)  
Pres - Brian Bieger KC9HEK (3/09)  
Pres – Mark Tellier AB9CD (by special election 5/09)  
VP – Brian Bieger KC9HEK  
VP - Brian White K9LCQ (appointed 3/09)  
Secretary - Sarah Parks KB9ZNC (resigned 5/09)  
Secretary - Mike Harris KC9CMT  
Treasurer - Mark Tellier AB9CD  
Directors:  
Dave DeFebo WB9BWP  
Mike Harris KC9CMT (became Secretary)  
Al Maahs KC9IJJ  
Hal Newton KB9OZN (appointed 1/2010)  
Howard Parks AB9FH (resigned 9/09)  
Duane Runnells KC9MJJ (appointed 11/09)  
Dave Schank KA9WXN (appointed 1/2009)  
Chatter:  
Brian White K9LCQ  
Mike Harris KC9CMT (4/09)  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Mark Tellier AB9CD  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Mike Harris KC9CMT  
ARES Wi SEC - Gary Payne N9VE (1/1/09)  
ARES Waukesha Co. EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site: Brian White K9LCQ  
Joe Schwarz, N9UX (10/09)

## 2010-2011

Pres - Dave DeFebo WB9BWP  
VP –  
Secretary - Mike Harris KC9CMT  
Treasurer -  
Directors:  
Al Maahs KC9IJJ  
Hal Newton KB9OZN  
Duane Runnells KC9MJJ (resigned 9/10)  
Dave Schank KA9WXN  
Mark Tellier AB9CD  
Chatter:  
Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Mike Harris KC9CMT  
ARES Wi SEC - Gary Payne N9VE (1/1/09)  
ARES Waukesha Co. EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Joe Schwarz, N9UX  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2011-2012

Pres - Dave DeFebo WB9BWP  
VP –  
Secretary - Mike Harris KC9CMT  
Treasurer – Joe Schwarz N9UX (1/2012)  
Directors:  
Al Maahs KC9IJJ  
Hal Newton KB9OZN  
Dave Schank KA9WXN  
Mark Tellier AB9CD  
Dan Workenaour N9ASA (2/2012)  
Chatter:  
Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Mike Harris KC9CMT  
ARES Wi SEC - Gary Payne N9VE (1/1/09)  
ARES Waukesha Co. EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Joe Schwarz, N9UX  
Mark Tellier AB9CD (1/2012)  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2012-2013

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT  
Treasurer – Joe Schwarz N9UX  
Directors:  
Al Maahs KC9IJJ  
Hal Newton KB9OZN  
Mark Tellier AB9CD (resigned 1/2013)  
Chatter - Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Jeff Annis, K9VS  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Hal Newton KB9OZN  
Special Projects Committee:  
Dave DeFebo WB9BWP  
ARES Wi SEC - Gary Payne N9VE  
ARES District EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Mark Tellier AB9CD  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2013-2014

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT  
Treasurer – Joe Schwarz N9UX  
Directors:  
Al Maahs KC9IJJ  
Hal Newton KB9OZN  
Chatter - Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Mark Tellier AB9CD  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Pat Hoppe WW9R  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Hal Newton KB9OZN  
Special Projects Committee:  
Dave DeFebo WB9BWP  
ARES Wi SEC - Gary Payne N9VE  
ARES District EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Mark Tellier AB9CD  
Dave Schank KA9WXN  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2014-2015

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT  
Treasurer – Mike Harris KC9CMT  
Directors:  
Al Maahs KC9IJJ  
Mark Morgan KB9RQZ  
Hal Newton KB9OZN  
Chatter - Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave DeFebo WB9BWP  
Dave Schank KA9WXN  
FM Simplex Contest:  
Joe Schwarz, N9UX  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Pat Hoppe WW9R  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Hal Newton KB9OZN  
ARES District EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Dave Schank KA9WXN  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2015-2016

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT  
Treasurer – Mike Harris KC9CMT  
Directors:  
Al Maahs KC9IJJ  
Mark Morgan KB9RQZ  
Hal Newton KB9OZN  
Chatter - Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave Schank KA9WXN  
Dave DeFebo WB9BWP  
FM Simplex Contest:  
Dave Schank KA9WXN  
Joe Schwarz, N9UX  
Field Day:  
Dave Schank KA9WXN  
Al Maahs KC9IJJ  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Hal Newton KB9OZN  
ARES District EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Dave Schank KA9WXN  
Web Wiki  
Scott Smith W9MBL  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2016-2017

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT  
Treasurer – Mike Harris KC9CMT  
Directors:  
Al Maahs KC9IJJ  
Hal Newton KB9OZN (resigned 9/2016)  
Tom Pachner W9TJP  
Dale Webler AB9DW  
Chatter - Mike Harris KC9CMT  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave Schank KA9WXN  
Dave DeFebo WB9BWP  
FM Simplex Contest:  
Dave Schank KA9WXN  
Joe Schwarz, N9UX  
Field Day:  
Dave Schank KA9WXN  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments - Hal Newton KB9OZN  
ARES District EC – Larry Noldan NZ9I  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
Web Site:  
Dave Schank KA9WXN  
Dale Webler AB9DW  
Web Wiki  
Scott Smith W9MBL  
Hamfest:  
Mike Harris KC9CMT  
Dave Schank KA9WXN

## 2017-2018

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary - Mike Harris KC9CMT (resigned 7/2017)  
Treasurer – Mike Harris KC9CMT (resigned 7/2017)  
Directors:  
Al Maahs KC9IJJ  
Tom Pachner W9TJP  
Stan Siehndel KD9AUY  
Barry Sprifke W9BLS  
Dale Webler AB9DW  
Chatter - Mike Harris KC9CMT (resigned 7/2017)  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave Schank KA9WXN  
Dave DeFebo WB9BWP  
FM Simplex Contest:  
Dave Schank KA9WXN  
Joe Schwarz, N9UX  
Field Day:  
Dave Schank KA9WXN  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments – Dave Schank KA9WXN  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Member / Mailing list – Mike Harris KC9CMT  
(resigned 7/2017)  
Web Site:  
Dave Schank KA9WXN  
Dale Webler AB9DW  
Web Wiki  
Scott Smith W9MBL  
Hamfest:  
Mike Harris KC9CMT (resigned 7/2017)  
Dave Schank KA9WXN  
**ARRL Wisconsin Section Mgr – Patrick Moretti  
KA1RB**

## 2018-2019

Pres - Dave Schank KA9WXN  
VP – Dan Workenaour N9ASA  
Secretary -  
Treasurer – Joe Schwarz N9UX  
Directors:  
Dean Berglund KC9REN  
Al Maahs KC9IJJ  
Tom Pachner W9TJP  
Stan Siehndel KD9AUJ  
Barry Sprifke W9BLS  
Dale Webler AB9DW  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave Schank KA9WXN  
FM Simplex Contest:  
Dave Schank KA9WXN  
Field Day:  
Dave Schank KA9WXN  
Auction – Dave DeFebo WB9BWP  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments – Dave Schank KA9WXN  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site:  
Dave Schank KA9WXN  
Dale Webler AB9DW  
Web Wiki  
Scott Smith W9MBL  
Hamfest:  
Dave Schank KA9WXN  
ARISS Project – Roger Heindl AC9BT

## 2019-2020

Pres - Dave Schank KA9WXN  
VP –  
Secretary - Dale Webler AB9DW  
Treasurer – Joe Schwarz N9UX  
Directors:  
Dean Berglund KC9REN  
Tom Pachner W9TJP  
Stan Siehndel KD9AUJ  
Barry Sprifke W9BLS  
Dale Webler AB9DW  
License Trustee - Dave DeFebo WB9BWP  
Repeater:  
Dave Schank KA9WXN  
FM Simplex Contest:  
Dave Schank KA9WXN  
Field Day:  
Dave Schank KA9WXN  
Auction – Curt Smith N9CBS  
Raffle – Tom Sherlowsky N9UFJ  
Meeting Refreshments – Dave Schank KA9WXN  
Historian - Dave DeFebo WB9BWP  
Yahoo Group - Dave DeFebo WB9BWP  
Web Site:  
Dave Schank KA9WXN  
Dale Webler AB9DW  
Web Wiki  
Scott Smith W9MBL  
Hamfest:  
Dave Schank KA9WXN  
ARISS Project – Roger Heindl AC9BT

## Members Holding Positions with National Organizations

(2019)

MRAC members over the years have also held elected positions or appointments with national amateur radio organizations. The following list is an attempt at listing them all in one place. The list will be presented twice, once by job title and once by individual's name. We are still digging out details on the positions. As usual, if you have any information for this list, please let us know. And as always, can any other local amateur radio organization boast anything like this list?

By Job:

### **ARRL Assistant Secretary:**

Harry Paston W9DJV / W2OAA - 1951

### **ARRL Central Division Director:**

R. H. G. Matthews W9ZN – 1937-1941

Clyde Richelieu W9ARE – 1947-1949

Jack Doyle W9GPI – 1949-1952, 1957-1963

### **ARRL Central Division Assistant Director:**

Fred Catel W9DTK – 1938

Tom Gettelman W9IZO - 1961

Reno Goetsch W9RQM - 1961

John Scarvaci W9GIL - 1961

Ross Hansch W9RBI - 1961

Bud Woida W9KQB - 1961

### **ARRL Assistant Division Manager – Wisconsin Section:**

Clarence Crapo 9VD – 1925

### **ARRL Wisconsin Section Communications Manager (later Section Manager):**

Clarence Crapo W9VD – 1926-1932

Al Kroner W9UIT – 1939

Emil Felber W9RH – 1943

Reno Goetsch W9RQM – 1949-1950

Bud Woida W9KQB – 1961

Patrick Moretti KA1RB - 2017

### **ARRL City Manager:**

Clarence Crapo 9VD – 1920

I.H. Strassman – 1922

### **ARRL Wisconsin Section Emergency Coordinator:**

Oliver Zander W9DIJ – 1941

Curtis Schultz W9LZU – 1948

Clarence O. Wahner W9YYY – 1949

Bernie Tower K9VPP – 1964-1966

### **ARRL Wisconsin District Emergency Coordinator:**

Gary Payne N9VE – 2004-2007

**AREC Chief of Liaison:**

H. H. Devendorf – 1948-1949

**Milwaukee County ARES (AREC) Emergency Coordinator:**

Wendell Ciganek W9SYT – 1942  
Ralph Koenig W9RUF – 1948 - 1951  
Bob Goldstein K9KJT – 1961 – 1972  
Ken Hahn WK9H – 2007 - 2008  
Dave Knaus WA9POV – 1972-1974  
John Leekley WB9SMM – 1978 - 1999  
Dan Workenaour N9ASA – 2006 - 2007

**Waukesha County ARES (AREC) Emergency Coordinator:**

Dick Oberholtzer W9ZPV – 1966  
Carl Rohde W9ROM – 1967  
Larry Noldan NZ9I – 2008 - 2012

**RACES (Radio Amateur Civil Emergency Service) Radio Officer (Milwaukee County):**

Ralph Koenig W9RUF – 1961-1964  
Herbert Zwarra W9MQA – 1965-1966

**National Council of Volunteer Examiner Coordinators (NCVEC) Chairman**

Tom Fuszard KF9PU – 2004-2009.

The list by Name:

**Fred Catel W9DTK** – ARRL Central Division Assistant Director 1938-?  
**Wendell Ciganek W9SYT** - Emergency Coordinator Milwaukee County 1942  
**Clarence Crapo W9VD** – Assistant Division Manager, Wisconsin Section ARRL 1925, ARRL Section Communications Manager (SCM) 1926-1932  
**Jack Doyle W9GPI** – ARRL Central Division Director 1949-1953, 1957-1963  
**Emil Felber W9RH** – Wisconsin Section Communication Manager (SCM), ARRL 1944, Central Division Assistant Director ARRL  
**Tom Fuszard KF9PU** – Chairman National Council of Volunteer Examiner Coordinators (NCVEC) 2004-2009.  
**Reno Goetsch W9RQM** - Wisconsin Section Communication Manager (SCM), ARRL 1949-1950  
**Bob Goldstein K9KJT** – Emergency Coordinator Milwaukee County ARES 1960-1973  
**Ken Hahn WK9H** – Emergency Coordinator, Milwaukee County ARES 2007-2008  
**Dave Knaus WA9POV (NQ9A)** – Emergency Coordinator Milwaukee County ARES 1973-1974  
**Ralph Koenig W9RUF** - Emergency Coordinator Milwaukee County 1949-1951  
**Al Krones W9UIT (K9AA)** – Wisconsin Section Communications Manager (SCM), ARRL 1939  
**John Leekley WB9SMM** - Emergency Coordinator Milwaukee/Waukesha County ARES 1978-1999, Southeastern Wisconsin District Emergency Coordinator ARES 19xx-2003, Wisconsin Section Emergency Coordinator ARES 19xx-2002  
**R. H. G. Matthews W9ZN** – ARRL Central Division Director 1937 - 1941  
**Patrick Moretti KA1RB** – Wisconsin Section Manager ARRL – 2017-  
**Roger Nielson N9DAA** – ARRL VUCC Awards Manager 1983  
**Larry Noldan NZ9I** – Emergency Coordinator Waukesha County ARES 2008-2012, Southeastern Wisconsin District Emergency Coordinator 2012-present

**Dick Oberholtzer W9ZPV** – Emergency Coordinator Waukesha County AREC 1966  
**Harry Paston W9DJV / W2OAA** – Assistant Secretary ARRL 1951  
**Gary Payne N9VE** - Southeastern Wisconsin District Emergency Coordinator ARES 2003-2009?, Wisconsin Section Emergency Coordinator 2008-2009  
**Rich Regent** - Wisconsin Section Manager ARRL 1980s?  
**Clyde Richelieu W9ARE** – ARRL Central Division Director 1947-1949  
**Carl Rohde W9ROM** – Emergency Coordinator Waukesha County AREC 1967  
**Bernie Tower K9VPP** - Wisconsin Section Emergency Coordinator 1964-1967, Emergency Communications Chief, Navy MARS – 1960s  
**Clarence O. Wahner W9YYY** – Wisconsin Section Emergency Coordinator 1949-1951  
**Wally Wallace W9EYH** – Wisconsin Section Communications Manager (SCM) ARRL 1942-?  
**Dan Workenaour N9ASA** – Emergency Coordinator Milwaukee County ARES 2004-2007, Assistant Emergency Coordinator for Voluntary Organizations Active in Disasters (VOAD). State Deputy Chief RACES Officer for Wisconsin ARES/RACES 2009-Present.

## All Members of Milwaukee Radio Amateurs' Club

(2019)

While working on the 2007 version of the club history one day I got to thinking about maybe trying to list everyone who was ever a member of the club. While I was digging through some materials I had I came across a list which Jim Tromblay began listing members and the year they maybe first appeared in a roster. I say maybe as rosters were not always timely (especially in the early years and after 1980) and digging through Treasurer's records could take forever. Early records often did not list a call sign with a person's name. If no call is listed below, it does not mean the person did not have a license. In the 1940s and 1950s there were often references to call signs without a name. You will see results of both of those practices in the list. A lot of cross referencing needs to be done. But it is a start. My work had begun (and was nowhere near being finished). Following is the list as it began in 2008 with additions for each year since (It's a big list, this will take some time). Thanks Jim.

It would be nice to have the last year they were a member, but that data would be impossible to come up with. The year first joined is shown (to the best of our knowledge). There are some blanks here as well as question marks. There is usually no indication as to if the person remained a member as many dropped out only to return at some later date. In some instances there are 2 dates for year first joined, as we do know the person dropped out only to later return. Some people were a member for just one year. In fact at various times over the years, attending a license class also brought a one year membership which sometimes would inflate actual membership for that year (over the years some officers and others determined if the club was a success by how many members it had). At least this provides some idea of who may have passed through the club over the years. As always, if you see any errors or know of any missing data (no offense is meant to anyone) please let us know. Currently 1518 past/current members appear in the list with more to come!

(The list is presented in alphabetical order by last name. Maybe some day there will also be a list sorted by call sign. An asterisk (\*) after the last name as well as bold type (**and red for those who can see it**) denotes charter member, (Hon) signifies an Honorary Member).

K9SUB			1960?
W9NMF			1937
W9NPS			1934
W9QUD			1937
W9ULE			1937
W9UMP			1937
W9WHX			1937
W9WYP			1937
W9ZGH			1937
WB9IJT			1991?
W9OWM	Charles P.	Ackerman	1946
WD9GHA	John	Adams	1980
K9XU (WA9TGI, AA9XU)	Richard	Adduci	2000
KE9PX	Chris	Ahl	1989
	Charles	Ainsworth	1923
	Ken	Ainsworth	1961
W9NGM	Frank	Albert Jr.	1950

K9VNM	Allen	Albringer	1967
KD9GGD	Mitchell P.	Alexander	1995
W2YLP	Jules	Allen	1991
W9GIR	Robert J.	Allen	1950
W9WTO	Warren H.	Allen	1954
W9WYH	Eugene J.	Alm	1954
WB9ZRB	Paul	Alm	1978
	Arnold	Ambrose	1949
	George	Ambrose	1949
	Leonard	Ambrose	1949
WA9PZU	Mel	Amidzich	1979
WD9DID	Earl	Anderson	1980
	Harold J.V.	Anderson	1951
W9OBU	Ray	Anderson	1934
W9BL	Gil S.	Andrew	1983
	<b>Munsen</b>	<b>Anger *</b>	<b>1917</b>
K9VS	Jeff	Annis	2003
K9WII	Mike	Ansfield	1961
W9UNY	P.	Anton Jr.	1934
KC9CEL	Joseph R.	Appleton	2001

WD9HOB	Edward	Arendt Jr.	1980
WD9GHV	Edward	Arendt Sr.	1980
	Lee	Arhelger	1983
W6NUC (W9KYE)	Ben W.	Armstrong	1953
KB9ISE	Deb	Arps	1995
W9ESE	Elmer E.	Ash	1945
W9DH (W9PQA)	Loren	Ashwood	1957, 1982
KA9BOF	Richard	Assenheimer	1978
W9WSY	Leland	Atwell	1935
K9KPR	Deanna	Atwood	2005
WA9BMA	Edwin	Bach	1973
KB9SFF	Andrew	Bade	2015
	Dave P.	Bahringer	1970
W9TFD	Edgar W.	Bailey	1950
	Max	Bailey	1983
W9QHL	Tom J.	Bailey	1946
W9VQD	J. Travis	Baird	1935
<b>9HO</b>	<b>Dr. Loy Schell Hillegas</b>	<b>Baird * (Hon)</b>	<b>1917</b>
KN9DCK	Carl L.	Baker	1957
W9VHX (W5BTL)	Dr. R. H.	Baker	1945
W9GSP	Herbert L.	Baker	1933, 1953
W9LJO	Charles W.	Ball	1953
W9FSV	Henry G.	Barnes	1931
W9CDY	Norman	Barnes	1941
KB9QMV	Thomas	Barrett	1997
KG9FC (N9MYL)	Carlos R.	Barron	1993
	Robert	Barrow	1995
W9HPZ	Anthony M.	Barszcz	1937
W9RPI	Harold R.	Bartell	1951
N9LBO	Keith	Basting	1991
9HW, 9ADL	Clarence F.	Bates	1919
KC9AIX	Mark	Batten	2013
	David Phillip	Bauer	1946
KC0EKG (KB9KXX)	Beverly	Baum	1995
	Floyd	Baxter	1923
WK9K	Peter D.	Bayne	1989
KC9TZJ	Darren	Beahler	2010
W9OUF	E.	Beck	1933
AE9H (WB9FTC)	Jack	Becker	1978
W9UOE	Jerome F.	Becker	1935, 1958, 1983
WD9FIS	Robert	Beckman	1996
KB9ZEW	William	Beebe Jr.	2001
W9QUN	Ernest L.	Behagen	1948
	Fred	Behm	1946

W9DJC	Ray J.	Behmke	1941
KD9FK	Donald	Behrens	1991
N9QIT	Bessie	Beider	1991
WD9GZI	Franklin	Beider	1977
	M.	Beisbier	1922
W9MDG	Elden J.	Belanger	1948
W9WYJ	Florence	Belanger	1954
W1LZU	Winfield W.	Bemis	1948
KN9BGI	Maurice	Benfer	1956
W9BNN	Leonard E.	Benson	1946
	Eugene A.	Berens	1947
W9DFJ	Irvin	Berens	1934
	Clarence E.	Berg	1923
W9CAS	Herbert F.	Berg	1934
W9YCQ	William	Berg	
	Richard R.	Berger	1948
KC9SBN	Darlene	Berglund	2012
KC9REN	Dean	Berglund	2012
N9BBC	Dr. George A.	Berglund	1980
W9IDW	Gerald	Bergmann	1950
N9RTM	Erich	Berman	1993, 2008, 2016
W8NQV	Gary	Bernske	1967
W9WZ (W9WZS)	Melvin	Bernstein	1941, 1959, 1976
9WP	Arther B.	Berresford	1922
	Ralph H.	Beter	1946
KA9CEI	Victor	Beyer	1980
KC9HEK	Brian	Bieger	2005
	Deborah A.	Bierbach	1996
	Daniel	Biernacki	1986
K7KCJ (W9PNC)	William J.	Birch	1950
W9SLC	Wayne N.	Bittner	1946
	Andy	Bizub	1982
	William W.	Black	1944
W9PAT	Woodley C.	Blackwell Jr.	1952
W9GIP	Joseph H.	Blair Jr.	1948
KE9CR (KA9SWZ)	Brooks	Blanchard	1985
	Justin W.	Blauert	1923
WB9FKK	Michael F.	Blenski	1971, 1989
W9NMP	Frank	Bliesener	1933
KC9GSW	John	Blimke	2005
WB9KAB	Adrian	Bloomberg	1976
	Robert A.	Blumberg	1952
	Fred	Blust	1923
W9KCY	Jack	Bock	1942
N9BJI	Joe	Bodeau	2008
	Robert H.	Boecher	1956
	Don A.	Boeck	1995

W9UBR	Henry J.	Boehm	1946
KB9FBM	Paul	Boese	1991
W9IZH	Robert J.	Bohmann	1951
W9FAJ	Bruce F.	Bond	1948
W9VSP	John C.	Bonnett	1956
AK4MI	Rodger	Boogren	2012
	Stephen	Boquar	1923
W9DYG	Fred R.	Borcherdt	1956
N9FIQ	Lawrence	Born	1986
W9LOH	Peter	Borse	1934
KB9VJN	Mark	Borski	2001
	Lynn	Boudreau	1982
W4LCP (W9QYW)	Arlan	Bowen	1958
W9DWI	George C.	Bowen	1935
W3HM (W9HI)	Howard J.	Bowman	1952
KC9WUG	Leland	Bradley	2013
W9VAN	Helmut?	Braun	1942
K9MKC	Dennis	Brechlin	1969
W9NYL	Raymond N.	Brecher	1946
W9TMJ	James	Breitweiser	1976
WB9AJL	Fred L.	Brethauer Jr.	1952, 1969
KB9TIV	Barbara	Brewer	1998
	Dan	Brewster	1998
KN9IAR	Larry	Brezan	1958
N0ENO	Richard	Britain	1984
KN9GMM	George	Brock	1958
K9OSC	Robert C.	Brock	1995, 1973
K9TNN (KA9LUW)	Nicholas	Broncatti	2001
AA9QR (N9NNH)	Daniel C.	Brophy	1995
W9EQP	William	Brossmann	1935, 1971
W9EZP	Henry (Art)	Brown	1952
	John Milton	Brown	1946
KA9TXU	Robert E.	Brown	1986
W9OUO	Robert O.	Brown	1952
	John	Bruchner	1935
KA9LXP (now K5LXP)	Mark	Brueggemann	1981
9AAN	A.	Bruning	1928
W9KZQ	Norman K.	Brushaber	1951
W9EYV	Joe L.	Bryson	1944
W9LUC	Alex	Brzuskiwicz	1951
	Edward A.	Buchholz	1953
W9VBZ	Edward R.	Buchholz	1952
K9RYW	Helmut "Buck"	Buchwald	1997
W19ARC (N9EAL)	D. Stephen	Buck	1996

9CEB	J.	Buck	1928
	Jeff	Buckles	1978
	Henry	Buckley	1952
WA9IFF	Mike	Buday	1994
K9HJH	Emerend	Bude	1977
N9AXW	Bob	Bukosky	1981
W9NJI	Russell T.	Bumbalek	1952
W9QKT	Carl A.	Bunce	1952
W9EH (WB9IJY)	Robert	Burgermeister	1973, 1991
W9KEU	Clarence	Burke	1946
W9JCW	Walter J.	Burke	1950
N9KHE (KA9ZKT, WN9ECP)	Russell	Burlingame	1969, 1987
KC9WQJ	Karen	Burris	2016
W5TGU (9DDU, W9JWT)	Reid H.	Burrows	1925, 1976
W9RKP	Russell E.	Burss	1934
K9CJK	James E.	Buth	1956
KB9LDW	Jackie	Bye	1996
KB9KSG	Marilyn L.	Bye	1994
KB9LDX	Mark	Bye	1996
N9RTL	Byron E.	Bye Jr.	1993, 1989
	Clay	Cagnie	1998
	F.	Cameron	1933
W9AWI	Rosemarie	Canak	1948
W9XA	Kermit	Carlson (Hon)	2017
KG9AC	Harold W.	Carpenter	1994
	Karen	Carpenter	1995
W9NGT	Sherman	Carr	1978
KS4NX	Ken	Caruso	1999
W9ATO	Ed A.	Cary	1922, 1934
9DTK, W9DTK	Fred	Catel	1923
W9AGO	Luella	Chambers	1948
W9ITJ	Victor	Chambers	1941
WN9OZX	Edward	Chandek	1949, 1973
W9ICM	George	Chapman	1976
	Ray P.	Charney	1942
N9QQA	Gabriel J.	Chido	1995
	Clarence F.	Christiansen	1951
WB9SDD	Larry	Christianson	1980
	W. H. E.	Church	1935
N9INT	Donna	Cieszki	1989
K4VKW (N9DRX, KD9AJ)	Harry	Cieszki	1983
W9SYT	Wendell S.	Ciganek	1935, 1956

KA9ZMK	Delbert	Clark	1987, 1963
	Bill	Clarke	2014
W9NMG	W.	Clarke	1933
KC9PQD	Ronald	Clayton	2014
W9OMN	Gerald. A.	Clouser	1950, 1956
	Howard E.	Coad	1948
	George A.	Coates	1928
	T. Harry	Cochrane	1922
ON4KCH (N9FOW, NM9L)	Jean Pierre	Coenen	1986
	Harold E.	Coffen	1952
W9AXR	Joseph S.	Cohen	19??
N4XX (W9VZL)	Theodore J.	Cohen	1953
W9HAT	John O.	Coleman	1956
W9PYM	Joseph T.	Collins	1934
KA9UYF	J. H.	Connor	1986
W9YZW	Thomas E.	Conrow	1954
	<b>Conde F.</b>	<b>Conroy *</b>	<b>1917</b>
WN9MMA	John E.	Considine	1956
WA9VNF	J. M.	Cook	1976
W9UGE	Ray E.	Cooke	1945
K9AYM	Robert	Cordes	1959
NZ9P	Dave	Cornell	1989
	Albert J.	Correa	1983
W9FY	D. Wesley	Correll	1945
W9GIN	Danny P.	Cosgrove	1950
	Arthur L.	Couture	1950
W9BVR (9ACY)	William G.	Cram	1923
W9VD, (9VD)	Clarence N.	Crapo	1918
W9BSR	John James	Crittenden	1953
KB9RJE	Gail	Cronin	2003
K9UGD	Jim J.	Cronin	2003
KA9JCP	Ron	Crown	1983
	George	Cummings	1923
	Ralph D.	Curcio	1946
	G. W.	Curran	1922
W9AVX	Cedric G.	Currin	1946
KG9EE (N9ZTW)	Tom	Czaja	2000
	Jerry	Czarkowski	1953
K9PSU	John F.	Czarnecki	1960
W9FHF	Roman	Czekalski	1934, 1948
W9VCC	Donald	Dallmann	1956
KA9KIQ	Daniel	Dalton	1980
	Scott	Daniels	1994
	Harold A.	Darnell	1946
K4JXV	Jack	Daugherty	1980
W9IZM	Gordon	Davidson	1980

	Johnye	Davidson	1980
N9VUV	Tim	Davis	1994
W9CUW	Charles C.	Dawson Jr.	1946
N9LTC	William	Day	1991
	Clarence E.	De Melle	1952
WB9TYV	Alfred	DeAmico	1934, 1980
W9SAA	Henry J.	Dean	1954
WB9BWP	David B.	DeFebo	1968
9FI, 9ACT	L. A.	Degner	1919
W9KSP	John	Deisinger	1942, 1991
W9ODN	Howard A.	Deller	1948
	Frank	Delzclt?	1942
W9YOZ	Edward	Demartini	1958
NJ9K (N9BZD)	Richard J.	Demski	1980
KA9AAB	Robert	Denneay	2008
WB9LBT	Robert J.	DeRoche	1991
WA9JWU	Francis	Derrick	1967
	Charles	Dettmann	1980
W9AXF	William	Deuring	1964
W9RZF	Rudolph	Deutsch	1952
	Harald H.	Devendorf	1942
N9IVK	George	Devich	1991
W9AEV (W9NMF)	Leo P.	Devine	1935, 1948
		Dewey Sporting Goods Co, (Hon)	1922
	Gerald J.	Dickhut	1995
K9EEO	George	Diderrich	1958
W9EWW	Edward W.	Diedrich Jr.	1937
KB9VXN	Robert	Diehl	2000
	Jerry K.	Dobbs	1994
W9GXN	George A	Dodge	1954, 1978
	Walter	Dolensek	1986
W9NSC	Jerome J.	Dolezal	1992
KB9G	Marshall	Dolgin	
9ALR	Mark	Doll	1922
N9LAD	Ralph	Doll	2012
KA9OFA	Armin F.(Pancho)	Doneis Jr.	1985
W9LDQ	Van K.	Dooley	1946
	Bruce D.	Douglas	1955
W9DR	James K.	Douglas	1947
KB9NYQ	Ken O.	Douglas	1998
	Sheila J.W.	Douglas	1995
W9GPI	John (Jack) G.	Doyle	1937
K9CEW	Darrell	Draeger	1958
KC9FTE	Joe	Dragotta	2009
W9PST	Don	Drengenberg	1958

K9BTG	John	Drengenberg	1958
AA9XH (KB9NRS, KG9KB)	Allan	Drobac	1996
W9OTF	L. D.	Drugmand	1946
WB9RYR	Steven	Dryja	1976
N9MN (WB9MSL)	Don	Duckett	1978
W9RFD	Bob	Dunham	2010
K9JLD	Jan	Dunham	2010
	James R.	Dunn	1953
	D.	Durant- Wentworth	1922
	Herman	Dustman	1946
W9SQL	Joseph J.	Dzidzan	1946
WB9LLW	Kenneth	Dziubek	1983
K0RRP	Michael	Eagen	1999
W9VCE	Elizabeth Jane	Eannelli	1953
W9UHZ (W9GTB)	Pasquale J.	Eannelli	1935
W9PXA	Fred E.	Ebel	1923, 1951
KA9USC	John	Ebersol	1987
KB9JOR	Brian K.	Eckelman	1996
KB9BK	Kevin B.	Edwards	2005
W9FXA	Jim	Effa	1961
	Dorothy	Eggers	1980
W9MOT	Kenneth W.	Eggert	1949
	Gerald P.	Ehley	1946
KA9LTQ	Gerald L.	Eide	1982
	Robert	Einem	1949
W9RZD	Joseph	Ellenbecker	1952
W9MJN	Joshua	Ellis	2016
W9QMD	Fred H.	Eltzsch	1957
	Donald L.	Engel	1946
K9CMX	Harold	Engelke	1964
K9GHT	Dale	Engler	1964
9VJ	E. E.	Enke	1928
W9DWJ	Earl E.	Erb	1948
	C. W.	Erbach	1922
W9CJN	Wilner R.	Erickson	1937, 1983
K9BBN	Michael	Erstad	2014
WB9AON	Gary	Ertel	1984
W8ELR (W9MNI)	Howard P	Estes	1951
W0CNC	John C.	Evans	1954
K9JYX	Donald	Evenson	1966
W9QMA	Dorothy P.	Fabishak	1952
W9HDH	Vernon L.	Fabishak	1950
WA9HEF	Stanley	Fadeski	1964
N9IQT, KB9BXC	Randy	Fahrenkrug	1989
W9BLQ	William	Fake	1964

	H. G.	Fawcett	1922
	Burtis L.	Fayram	1954
W9YFW	Gordon J.	Fedder	1952
	Ronald G.	Fedder	1956
W9RH, (9RH)	Emil R.	Felber Jr.	1924
N9IJW	Thomas	Fenno	1989
KB9ADH	August	Ferber	1988
N9BKW	Thomas	Ferderbar	1983
K9AQX	Joseph	Ferris	1958
	Paul R.	Fetherston	1953
N9HWB	Robert	Fetterly	1989, 2007
W9WVL	George W.	Fields	1935, 1954
WD9FIR	Ruth	Finch	1979
W9NKP	L.	Fink	1933
	V. J.	Fink	1947
	William J.	Finn	1983
W9LPF	James A.	Fischer	1935, 1944
KB9OM	John W.	Fiscus	1981
W9DZE	Grant	Fitch	1955
W9OI	Walter E.	Fitting	1958
	E. T.	Flewelling (Hon)	1928
W9MOV	James C.	Flieger	1951
KB9JTT	Wilson G.	Flor	1995
WA9JGI	William H.	Fluegge	1967
K9BKJ	Kenneth	Forbord	1958
KA9GRJ	Esthetial	Ford	1983
KD9JTI	Gregory	Forster	2018
KA0DFM	Rev. Charles	Found	1983
K9ZZ (KB9PRG, AA9VC)	Scott	Frakes	1997
W9HFJ	Melvin	Frank	1931
KD9RO	Peter	Franks	1985
W9DFI	Charles A.	Frederickson	1948
K9HGJ	Roy	Freeman	1957
W9HDE	Daniel E.	Freiburger	1951
W9ZLD	Howard	Frey	1957
WA9NAY	John	Friedrichsen	1994
WA9YAL (KF9QD)	Nels	Friis	1994
W9OSS	Herman	Frisall	1934
WA9IXP	Marcus	Frisch	1985
W9OSS	H.	Fritschel	1935
KC9AMI	Oscar	Froehlich	2001
K9BTT	Walter	Froehlich	1956
W9WCF (KA9GVX, N9IBU)	William C.	Fullhart	1954, 1978
KF9PU (N9MGZ)	Tom	Fuszard	1991

9CFZ	Clayton	Fyfe	1922
N9VME	Raymond	Gabik	1993
KC9AMH	Steven	Gagnon	2002
	Peter	Gaido	1946
W9SO	William P.	Gainer	1935
KB9POX	John	Galbraith	1996
W9SUB	Robert M.	Gallun	1948
KA9DAW	Thomas	Gancarcik	1980
KB9ZUH	Carol	Gariner	2001
KB9YXP	Geoff	Gariner	2001
N9BBR	Joseph	Gasiorowski	1979
	J.	Gay	1933
W9ZBP	Leonard W.	Geier	1942
W9FJE	Allois F.	Geiersbach	1945
N9EDQ	Jeff	Geil	2015
9AOE	Dan	Gellrup	1917
KG9CA	Curtis J.	Gemmel	1994
K9GSO	Leo	Gering	1958
W9UPM	Lester	Gerlach	1937, 1995
	E.	Gesch	1922
W9IZO	Thomas R.	Gettelman	1931, 1941
W9LVV	Albert	Gibes	1951
WB9JWT	Roger	Giesfeldt	1979
	William	Gill	1922
	J.	Gilpatrick	1922
	Arnett E.	Girardeau	1956
W9UGN	Robert A.	Glamm	1935, 1968
W9QWE	Dewey L.	Glaser	1941
W9SJD	Charles	Glassl	1935
	Arthur A.	Glauz	1922
W9YYW	Walter	Glish	1954
N9ME (NE9TS)	Greg	Glista	2016
KG9GL	David	Go	1995
W9PHQ	Henry E.	Goeden	1945
	James L.	Goggin	1948
WB9FPR	Mark	Goitermann	2010
	Donald	Goldman	1946
K9KJT	Robert	Goldstein	1959
W9AER	Herbert C.	Goltz	1954
N9IOI (KB9CPV)	Tom (Flash)	Gordon	1989
KB9VNE	Robert F.	Gorski	1999
K9KGC	Ron	Gorski	1961
W9NKQ	Charles C.	Gould	1952
	Stanley T.	Grabski	1952
W9DXG	Frank	Gradischnig	1954
KC9IIV	Charles	Grady	2006
WB9GGI	James	Granneman	1972
WA9TID	Robert J.	Graushar	1996
	M.	Grave	1922
K9AEV	Clarence J.	Green	1956

W9WCR	Ralph	Green	1946
	Jerome I.	Greenblatt	1950
W9IO (W9LVR)	Russell C.	Greenwood	1947
W9KLK	George A.	Greeson	1947
K9OLR	Donald	Grenda	1959
	M.	Greve	1922
KB9PRF	David	Griffin	1997
KA9UGY	Ivan	Griffin	1987
KC9AYN	Steven	Griffin	2002
WD9EAU	Gordon	Griffith	1980
W9ARM (KD9DZK)	Eric	Griswold	2015
	M. B.	Grogan	1920
W9KQD	Donald J.	Gross	1956
W9ITT	Herman	Gross	1969
	Ralph J.	Groth	1946
WB9OJD	Erling	Gruel	1980
W9NEM	John D.	Guerard	1952
W8KNP	J. A.	Gundry	1935
	Ambrose M.	Guriel	1951
W9IH	Bob	Guthrie	1933
	Elmer	Gutknecht	1982
W9FPA	William J.	Haase	1952, 1978
W9AMM	Don	Habeck	1959
KA9PCJ	Harold	Hacka	1984
KB9KYI	Ron	Hagen	1996
WK9H, (AB9LL)	Kenneth	Hahn	2005
K5MAH	Margo	Haines	2011
K0TRH	Tomas	Haines	2011
	Ellen	Hallquist	1956
K9MTM	John	Halser	1959
WA9KNL	Frank	Hamerski	1967
KE4IWZ	Glynn	Hamilton	
K9WIG	Thomas	Hamilton	1967
W9LSH	Clarence M.	Hammes	1945
W9BG (W9RBI)	Ross	Hansch	1966
W9AQN	Jim	Hansen	2000
W9GZR	Joseph R.	Harkness	1949
N9FPG	James	Harrington	1985
KC9CMT	Michael	Harris	2005
	David	Harrison	1984
	Harry	Harrison	1935
W9IZX	Orles	Hart	1935
KG8AZ (N9MTP)	Thomas	Hart	1991
	Edward M.	Hartman	1947
	J. D.	Harvey	1922
W9GYE	Richard	Haskey	1958
KC9JET	Paul	Hass	2006
9BBY	Carl	Hatch	1925
	Donald	Haufschild	1948

W9EXW	John J.	Haugh MD	1948
W9UBA	Charles	Haut	1958
K9DUQ	Hilbert	Haut	1958
W9QIZ	T. K.	Hawley	1937
W9OOI	James Ellis	Haworth	1952
W9OOO	Donald	Hayner	1983, 1942
K9UVM	Vernon	Hazlett	1994
	William	Heberlein	1953
	Michael	Heese	1985
N9SVE	Mark	Heilmann	2009
KA9DMQ (W9GMM)	Herbert G.	Heimann	1946, 1979
N9LNE	Michael	Hein	2015
W9ACM	Ted C.	Hein	1946
AC9BT	Roger	Heindl	2018
KA9JAA	Carol	Heinen	1979
	Cedric	Heller	1923
K9IWD	Billy	Helm	1958
	Arthur	Helminiak	1946
WG9I (WA9RWA)	Richard	Helz	1967, 1982
WB9ZKU	Tim	Hendricks	1977
KA9MWV	Myron W.	Hendrickson	1993
W9ESJ	Alfred C.	Hennig	1941, 1981
WA9HHT	Paul	Henning	1964
KB9ZB (N9KWW)	Ronald F.	Henry	2017
AB9EZ (N9VTN)	Robert L.	Hensiak	1993, 2000
W9MQD	Maurice	Heppe	1958
	R.	Herbst	1933
WB9RSK	James	Herriges	2002
	S.	Herro	1988
	James	Hertel	
N9ICH	Robert	Hertzberg	1991
K9AQK	Tom	Herzig	1958
	George	Herzog	1946
W9OPS	Thomas	Herzog	1951
W9LSK	Will E.	Herzog	1950
W9VQG	Robert E.	Hetzel	1956
	Louis	Heyman	1920?
AE9W	R. L.	Hicks	1980
	<b>Harvey</b>	<b>Hilger *</b>	<b>1917</b>
K9JQB	Harold	Hill	1958
KB9OK	Rudolph	Hilsman	1980
KA9BXB	Ralph	Hinds	1980
W9CIO (W1PZK)	Logan J.	Hines	1948
W9VAF	Walter Richard	Hintz	1953
KA9WDA	John B.	Hitz	1986
	<b>John B.</b>	<b>Hitz *</b>	<b>1917</b>
K9YZI	Waldemar	Hobach	1954

K9PYY	Sherman	Hochman	1959
W9EIH	E.	Hodson	1933
W9NQH	Paul V.	Hoecher	1950
W9BDA	John	Hoffman	1937
K9PSX	Everett	Hokanson	1964, 2001
K9BAJ	Ned	Hollister	1958
	John C.	Holmes	1942
W9LRB	R.	Holtz	1933
W9AVF	Walter J.	Holzer	1950
WW9R (KA9OIZ)	Patrick	Hoppe	1982 2005
W9KYT	John	Hopwood	1967
W9YSO	H. Frank	Horak	1941
W1AIP	Jack E.	Horner	1995
W8WWX	Chet T.	Horton	1945
W9HTJ	Ray H.	Host	1950
NV9L	Valerie	Hotzfeld ( <b>Hon</b> )	2018
	Hy. R.	Hove	1922
	<b>Allen</b>	<b>Hove *</b>	<b>1917</b>
	Robert A.	Howard	1983
	Albert J.	Howe	1946
KA9WRL	William	Howe	1986
9CVI	Edward	Howell	1919
OA4BL	Armando	Huaman	1951
KA9MXN	Chester	Huber	1983
W9JPS	Roman J.	Hudzinski	1938, 1949
OA4BL	Armando	Hueman	1950
W9DGO	Robert	Huenemann	1958
W9ULA	John (Jack)	Hughes	1959
AB9EY (KB9QZQ)	Lester	Hundt	2000
	Elton L.	Hunt	1951
W9THN	Robert R.	Hunteman	1950
	Paul	Hutchins	1923
W9FTY	Gildea	Hutchinson	1951, 1964
	Robert	Hutchinson	1947
KC9UDU	Glen	Hutchison	2013
K9LQ (KB9SLC)	Alfred	Huwald	1998
N9CSM	Edward	Ignatowski	1983
W9CYI	Robert	Immekus	1948, 1998
NQ1R	Robert	Inderbitzen ( <b>Hon</b> )	2016
W7JSP (W9GQO)	Emmanuel J.	Irving	1945
	Ervin W.	Jackson	1922
W9CID	Irving	Jackson	1945
KA9BON	Jeffery	Jackson	1980
W9CCZ	Kenneth J.	Jacobchick	1946, 1986
	John K.	Jacobson	1951
KC9MXZ	Ken W.	Jaeger	2010

	Richard	Jaeger	1952
KN9KAI	Michael	James	1958
WD9JKZ	Sylvester	Janczak	1980
KN9INP	Gordon	Jaworski	1958
W9LUQ	Earl	Jenkins	????
K9QIL	Ernest	Jensen	1976
9WD	K.	Jensen	1928
	Peter J.	Jensen	1952
W9JEK	Wilbur	Jensen	1986
KA9OKG	Art	Jenson	1984
KD9JTG	Joseph L.	Jester	2017
W9OQS	Daniel	Jeziorski	1991
KD9AFC	John	Johannes	2014
WA9LZM	Richard	Johnson	1978
	Paul F.	Johnson <b>(Hon)</b>	1926
WD9FCH	Ronald	Jolliffe	1983
	Curtis	Jones	1952
KF9FA (KB9DCZ)	William D.	Jones	1989, 2008, 2018
W9GKE	Albert C.	Jorgensen	1933, 1945
KA9IWS	William A.	Joyce	1979
		Julius Andre & Sons Co. <b>(Hon)</b>	1922
KN9IVL	Richard	Junek	1956
KA9PBY	Robert	Junker	1983
KC9MJO	John	Jurek	2007
WB9RMC	Winfried (Fritz)	Jusak	1983, 1994
W9CBS	Raymond F.	Kaas	1946
W9SNK	H. (Herbert) Charles	Kaetel <b>(Hon)</b>	1928, 1946
W9EBJ	Ronnie	Kalkhoff	1950
	Edward	Kampa	1934
	Joseph	Kanderski	1985
KB9IRH	Jan	Kanieski	1993
W9RK (N9UAT, AA9NX, N9RK)	Roger	Kanieski	1993
W9RZV	Fr. John	Kapellen	1953
WB9RQR	Stan	Kaplan	1982, 1993
W9KEG	Frank G.	Karioris	1951
KC9AVZ	George	Kasica	2002
WA9DWZ	William	Kassulke	1967
WB9TIK	Robert	Kastellic	2011
	Samuel G.	Katsekerrs	1942
K9CME	Lance	Kaufman	1958
KA9MWT	Kate	Kedney	1991
W9KMF	James J.	Keller	1946
	Nelson	Kellogg	1922

K9LJ	Len	Kelter	1995, 2005
N9QQ	Kevin	Kelver	2018
W9WYE	Leonard	Kendzierski	1958
W9AR (W9HK)	Gerry	Kendzior	2002
	J.	Kenmeter	1928
W9UFX	Theodore C.	Kennedy	1952
W4DDZ (W9SNW)	Theodore C.	Kercher	1935, 1950
W9THH	Milton W.	Kerlin	1946
9AFE	V.	Kerrigan	1928
W9CUA (W5JOB)	Gene	Kersten	1942
	Earl L.	Kester	1948
W9VOD	Bruce	Keymar	1958
NE9W	Rev. William	Kidd, S.J.	1984
KB9DNE	Dean	Kiefer	1990
WA9MME	Richard	Kimball	
	Carl H.	King	1922
K9CET	Jack	King	1958
W9NRX	Joseph J.	Kircher	1933, 1939
WB9GYT	Rick	Kissell	1993, 1995
W9RSA	William	Kittson	1934
WD9EUN	Alan	Klager	1980
W9VZR	Charles	Klawitter	1953, 1983
N9PK	Phillip	Klein	2014
	<b>A. C.</b>	<b>Kletzsch Jr. *</b>	<b>1917</b>
9DGB	Louis W.	Klingbiel	1920?
KA9GVW	Ray	Klinkosh	1978
	Chester P.	Klofta	1948
KA9BKQ	Janet	Klug	1980
W9NKK	Douglas W.	Kluge	1948
	W. C.	Kluge	1923
W9LQR	John J.	Knapp	1945
N9GNG	Karen M.	Knapp	1988
N9QA (WA9POV)	Dave	Knaus	1971
W9EBG	Frank E.	Kneiser	1942
KA9EHC	Ervin	Kobb	1980
W9VIB	Henry W.	Koch	1935
K9DD	Emmett	Koebel	1965
N9VJ	Charles J.	Koehler	2017
	Gilbert C.	Koehler	1952
W9DGB	John	Koehler Jr.	1950
W9RUF	Ralph O.	Koenig	1934
W9HIF	Lowell W.	Koeppell	1950
	George	Koeppl Jr.	1948
KA9RFM	Terry	Koller	1984
	Lester	Kollie	1945
N9ZJD (N9JD)	John	Kopmeier Jr	1994

KC9CYQ	Coletta	Kopp	2016
KB9OSC	John	Kopp	2016
W0USL (K9WGN)	John	Korns	1961, 1946
KA9WBR	Dennis W.	Kosek	1994
KC9WV (KA9FVD)	Stan	Kotecki	1983
K9GBK (KB9LDY)	George B.	Kowalski	1995
KF9XL (KB9ITG)	John	Kraak	1994
K9HXA	Gerald	Kraczek	1957
	Kennett	Kramer	1950
	Raymond	Kramer	1986
W9BYE	E.	Kranik	1933
	Herbert	Kranitz	1945
W9IDV	Victor	Kranitz	1941
W9KHE	Alexander L.	Krasonya	1945
AC9JK	Judy	Krassman	2016
	Ken	Krassmen	2016
W9VLK	Fred A.	Krause	1938, 1947
W9JK (W9UJM)	Jack C.	Krause	1948, 1971
W9BTQ	Milton I.	Krauthoff	1949, 1969
W9HRM	Erwin W.	Kreis	1933
KN9ESA	Don	Kreitlow	1961
KC9CEQ	Charles J.	Kremer	2002
W0IBW	John E.	Kremers	1950
W9OVW	Leander M.	Krickel	
KC9YEX	Maxwell	Krider	2014
W9QKQ	Everett	Kriese	1946
W9SKF	Norman	Krohne	1945
K9AA (W9CM, W9UIT, W9ELD)	Aldrich C.	Krones	1931
K9BHN	Dave	Kruschke	1957
W9UGZ	John J.	Kubash	1946
W9DYF	Louis F.	Kulinski	1945
W9OMY	Jack	Kumath	1949
KB9ZFA	Jennifer	Kunde	2001
K9CJP	Tony	Kuntz	1960?
W9CWK	Joseph	Kuranz	1956
W9FSS	Harold	Kurth	1928
	J. B.	Kuszewski	1922
KA9TSM	Roy	Kwok	1987
KA9AIW	Marcel	Lachenmann	1982
W9ECL	Phil	Laeser	1980
	Emery	LaFave	1997
KA9IVF	Charles	LaForce	198?
	R. F.	Laidlaw	1920?
W9KVX	Walter A.	Laing	1953
W9YEG	Frederick R.	Lambrecht	1937

W9WIH	Verne E.	Lampiris	1946
	Mary S.	Landis	1991
	Margaret	Langer	2015
KD9FPC	Thomas	Langer Jr.	2015
WA9AOE	Leland	Lannoye Jr.	1982
WA9HED	Lee	Lansinger	1963
WA9YRA	Alexander	Lapinski	1985
W9HFA	John F.	Larkin	1934
W9FNL	Howard E.	Lasanske	1950
W9LZY	Richard C.	Lathrop	1946
W9LJV	Robert E.	Lathrop	1945
9ATX	R. E.	Lathrop?	1922
	Elwyn J.	Laurent	1952
NK9O (KA9NYT)	Arnie	Lausevich	1980
W0USF (W9RZJ)	Dr. G. P.	Lawrence	1952
	Jan (?)	Lazachek	1990
W9HCN	Richard	Lazarski	1958
W9VAT	John	Le Feber	1953
	Kenneth	Le Gros	1946
W9OOF	Clifford W.	Lee	1952
W9TKY	Paul A.	Leeb	1945
WB9SMM	John	Leekley	1990
KA9DMP	Marie	Leekley	1980
W9QF (KD9LEH)	David	Lehew	2010
KA9URI	James	Lehmann	1987
KB9FOQ (W9LAK)	Phillip S.	Lehmann	1950, 1991
	Andrae John	Lehner	1952
	B.	Leibovitz	1933
	J. C.	Leisering	1950
WB9KYR	Paul	Leising	1978
WD9DHI	Gregg	Lengling	1978
W9ADI	Paul J.	Leser	1937
NQ9N (N9DMN)	George	Levar	1983
	George	Levinson	1923
N9IDX	Milan	Levrich	2005
K9JLA	Jacki	Lewis	2001
9FMI, W9FMI	Lloyd	Lewis	1928, 1937
K4PG (W9UH)	Lynn P.	Lewis	1945
W9TXF	Norman G.	Lewis	1935
W19TOM (KB9TZB)	Thomas	Liebe	2008
W9ZNF	Alfred	Lietzke	1953
	Helene	Lindahl	1953
KA9PIC	Joseph	Lindsay Jr.	1983
WB9UHJ	David	Lingelbach	1977

W9NZF (W9ZOL, W2HWI, W2LTS, W0NZF)	Fred	Linn	1975
	Gerald A.	Lipscomb	1953
W9OOL	Ted S.	Lively	1945
KB5ZJU	Phillip	Lodde	2015
W9HCA	Roger	Loebel	1955
KB9ZEZ	Robert	Loescher	2001
W9MPZ	Francis J.	Loftus	1946, 1976
KC9TGE	David	Lofy	2011
N9AGO	Bill	Longe	1989
	Luther M.	Lorance	1950
KA9DNL	John E.	Lorbiecki	1980
K9WUF	John F.	Lorbiecki	1945, 1984
	<b>A. Bertram</b>	<b>Lord *</b>	<b>1917</b>
W9ZOL (KB9LTT)	Willard	Lorenz	1998
	Tom	Lowe	1951
KC9AMJ	Rich	Lubinski	2001
W9EMC (KB9NGW)	William	Lubitz	1996
	Gerald	Lucchesi	1952
W9BLY	John	Ludwig	<1948
KA9ICC	Marvin	Luecke	1979
	Fred	Luers	1923
W9ALL	Frank	Lutrash	1928
	R.	Lutz	1933
KA9DBL	Thomas	Lux	1983
W9ATL	James	Lynch	1967
WD9DNM	Richard J.	Lyons	2000
	Peter J.	Maager	1987
KC9IJJ	Al	Maahs	2006
W9JQH	R.	MacDonald	1933
W9SWP	J.	Maertz	1934
W9HHG	C.	Maerz	1933
W9ITZ	Edward	Mahnke	1934
W9KIZ	Theo	Maijala	1935
K7GST (W9TPT)	Frank R.	Maiorana	1947
N9BKB	Edmund	Makowski	1981
	Jim	Malek	1990
W9ZO	Patrick P.	Malloy	1980, 1996
W9ECV	Mark W.	Mandelker	1952
WD9X	Jay	Maple	2005
KD9Y	Roland	Marks	2008
KC9EOW	Cathy	Markstrom	2012
KB9MMA	Jim	Markstrom	2012
KC9POP	Sam	Markstrom	2012
W9STK	John	Marshall	1946
9EFF	Henry	Martens	1928

N9ZLB	Maria	Martin	1995
WN9DJF	Gustav	Marx	1937
N9QLE	Ralph	Mason	1997
W9ZN	R. H. G.	Mathews ( <b>Hon</b> )	1928
	Charles	Mattias	1945
K9EEU	John	Mattick	1958
N9ICG, KA9PBZ	Michael	Maury	1983
KA9USA	Harold	Mayer	1985
AA9CV	Vergil	McArthur	1995
	Patrick	McCabe	1946
WA9JMO	Larry	McCalvy	1979, 2006
KB9ZH	John	McCartney	1983
WN9TLG	Michael	McCoy	1966
	Carl E.	McDonald	1951
W9RUQ	James	McGee	1952
KC9YRS	Denise	McGowan	2015
KC9YRR	Robert J.	McGowan	2015
	Frank R.	McHugh	1985
KB9MMI	Mike	McKenna	1996
WA9SGB	Jack	McKenty	1967
N9BE	William	McLane	1978, 1986
W9ATK	Jack	McLeland	1964, 1980
	Marion	McMillan	1995
W9CUJ	Dohrman W.	McMillin	1937
W0EKM	Donald J.	McNamara	1948
W9YZD	Miles	McNamara	1958
WB9PTC	Dick	McNew	1978, 1983, 1996
	Mathew	McNew	1982
KB9QL	Norman	McNew	1993
	Claude	Meier	1980
9DVG	E. A.	Meisenheimer	1922
KC9EV (KA9FPY)	Gerald	Melotik	1980
W9CXG	Theron G.	Melotte	1948
	Jolia	Mendez	1995
	Cary J.	Merkl	1990
WB9PSE	John	Merkl	1992
KZ9W (KC9CB)	B. Daniel	Merritt	1981
W9CHD	Charles J.	Merten	1957
W2UOL	Donald	Merten	1941 1964
	Ernest	Metcalf	1922
AA9DO	Joseph	Mettry	2005
KB9PRD	Donald E.	Meurer	1996
K4HQY (W9GVL)	Charles O.	Meyer	1928
9BKR	John F.	Meyer	1922
W9RUJ	Mary A.	Meyer	1948

W9KLN	Robert	Meyer	1941
W9QHU	Randolph	Michel	1958
KB9RVP	Peter A.	Mihas	1992
WS9I (KB9DZ)	Michael P.	Mikecz	2012
KC9WW (WN9LKS, WD9IYA)	Fred	Mikolajewski	1979, 1998, 2005
W9STE	Eric R.	Mildebrath	1948
9SR	C. E.	Miller	1925
W5OEG (W9GJX)	Charles V.	Miller	1948
W9WYG	Joseph	Miller	1983
	Lawrence	Miller	1948
W9CJO	Royal D.	Miller	1950
	<b>Oscar</b>	<b>Miller *</b>	<b>1917</b>
9SP (9TN)	Robert	Miregler	1919?
W9MJE	Anthony	Mis	1958
W9THE	Chuck	Mitchell	1982
WD9HBZ	Duane	Mitchell	1979
K0QLE	Jan	Mitchell	1960
KN9JXD	Len	Mitchell	1957
WB9FVH	Charles	Mitrowke	1976
WA9VFD	Kevin	Moderow	2017
	George	Moe	1980
KA9WOB	Curt	Mohr	1986
WA9CFA	Lester R.	Moldenhaur	1950, 1990
	J. G.	Montague	1922
W9BVB	F.	Moore	1933
K9KLM	Bernard	Moores	1961
KA1RB (W9UQ, KA1RB, WB1BZJ)	Patrick	Moretti	2000, 2017
KD8CTL	Gavrielah	Morgan	2014
KB9RQZ	Mark	Morgan	2014
WB6SWU (W9LFP)	John R.	Moriarity	1967, 1951
W9JGU	Vernon	Morris	1935
W9AMB	Fred G.	Morton	1948
	Robert	Morton	1980
W9NPS	R.	Moser	1933
K9AIC	Dave	Mountain	1961
W9UEO	Charles D.	Mouzis	1946
9BNB	George J.	Mueller	1922
W9EAJ	Harold W.	Mueller	1949
WB9VSM	Ray	Mueller	1980
KD9NW (AC9FY, KC9WXC)	Steve	Mueller	2013
W9KEJ	Wayne	Mueller	1958
N9EHF	Charles	Mundt	1984
WD9DYF	Burbank	Murray	1980
W9VBQ	Thomas	Murtaugh	1952

KB9OC (WB9BGJ)	Sus	Musashi	1969
K9WRU	Lee	Mushel	196?, 1970
KA9GIM	Bill	Myers	1987
K9KDN	Kevin D.	Naker	2009
WB9AUE	Kimbal	Nap	1969, 1987
KD9MNH	Michael	Nauman	2019
W9LBV	Barney	Nawn	1951
WA9AOL	Michel	Nazzoni	1967
	Darren	Neahler	2010
	S. B.	Neff	1950
KN9KJN	Kenneth J.	Nelan	2016
9BHM	Lawrence A.	Nelson	1922
	Sidney	Neu	1923
WA9SAI	Allen	Neuser	2015
W9HWO	R.	Newhauser	1933
KB9OZN	Harold (Hal) G.	Newton	1995
	Erwin G.	Nickel	1922
N9DAA	Roger	Nielsen	1983
	Anthony K.	Nielson	1946
W9CRQ	Rex	Nielson	1980, 2006
	Orlando	Nieman	1937
	Harold	Nitz	1948
K9DGG	Raymond	Niver	1958
W9LGO	Ottmar W.	Noeske	1941
N9FEW (WD9AMO)	Philip	Noftz	1980
NZ9I (KC9IJA)	Larry	Noldan	2005
WI9VAL	Valorie	Noldan	2005
	Leo	Northrup	1946
W9ELA	Clyde	Norton	1935
	Robert	Norton	1980
	Rose	Norton	1985
	Dorothee	O'dell Soldner	1949
AB9OO N9PSM	Mike J.	O'Donnell	1992
N9NLK	Joseph	O'Farrell, Jr	1994
W9ZPV	Richard	Oberholtzer	1953
	Karl	Oberteuffer	1922
W9BFC	C. W.	Ofelt	1948
WN9UBV	Joseph	Ogurcak	1953
WN9UBY	Larry	Ogurcak	1953
KA9GYE	Lois	Oliver	1980
	Lester	Olsen	1950
W9YZG	Gary	Olson	1958
K9UDE	Lloyd	Olson	1937
W9TJO (KD9HOH)	Thomas J.	Oman	2017
W9LCD	James H.	Ott	1951

W9KJA (W9AKB)	John I.	Ottmann	1946
K9COW	David	Ozonoff	1958
W9TJP	Tom	Pachner	2015
AA9PH	Lon	Pachucki	2004
W9RNA	Earl J.	Pahl	1948
WB9JPH	John A.	Palese	1988
W9CXW	Herman J.	Pannenbacker	1948
	Robert J.	Paquette Sr.	1982
W9CCD	Herbert J.	Parish	1933
KC9GDX	Brian	Parker	2016
W9GJJ	Jack	Parker	1964
WA9MLY	Ralph	Parker	1972
AE0Z (AB9FH, KB9VJS)	Howard	Parks	1999
KB9ZNC	Sarah	Parks	1999
W9JY (W9QHT)	George	Pasdirtz	1952
K9EBR	Dave A.	Passet	1987
9ALG	E.	Passow	1928
W2OAA (W1DVJ, W9DJV )	Harry	Paston	1949
KD9ZX	Andrew A.	Patin	1990
	<b>Arthur</b>	<b>Paukner *</b>	<b>1917</b>
W9FDX	Douglas A.	Pavek	1948
W9OMZ	Jeanne	Pavek	1952
	<b>Alonzo</b>	<b>Pawling *</b>	<b>1917</b>
N9VE (N9VEV)	Gary A.	Payne	2003
W9HXE	Karl O.	Pearson	1952
	R. A.	Pelishek ( <b>Hon</b> )	1919
NW9X	Harry	Peliska	1991
N9PAF	James H.	Perkins	2008
9EGC	Gordon	Perrin	1922
N9EAV	Gordon	Perrow	1983, 1991
W9MWD	Robert H.	Perthel	1948
W9LJU	Raymond T.	Peschek	1933
AB9G	John	Peterman	1994
W9KJR	Milton	Peters	1945
W9FAD	Quintin N.	Peters	1945, 1977
W9PGL	Vern	Petersen	1981
WB9EEL	Donovan	Peterson	1937, 1979
KA9DLK	John	Peterson	2001
W9YCV	Lester	Peterson	1972
W9AEN	Norman L.	Peterson	1948
	Robert E.	Peterson	1946, 1960
W9QEZ	John R.	Pettigrew	1946
KF9PX	Richard	Petzold	1991
W9STP	Harvey	Pfeifer	1958

W9IZQ	George J.	Pfister Jr.	1939
KB9PVH	Steven	Phelps	2005
KA9MXM	George	Philbert	1981
W9CRG	Bernard E.	Philippson	1933
	Emmett E.	Phillips	1988
	James E.	Phillips	1996
KA9FVC	John	Picciolo	1984
	August C.	Piechowski	1950
N9HIP	Jack	Pierce	1988, 2000
W9VKR	Bob	Pinter	1957
K9BSH	Norbert	Piotrowski	1956
9DKA	Jack	Pisfer	1928
	Larry	Plachinski	1987
KB9PRC	Matthew	Planning	1996
W9UJN	Don	Plautz	1935
N9XCX	Kay A.	Pleyte	1996
KB9OSB (KA9MWU)	Michael	Plichta	1994, 1980
W9LAD	Bruno	Plitzko	1933
	Clemens	Pochowski	1952
	Robert Allen	Podewils	1951
	Rudolph	Pohl	1923
	Rudy	Poklar	1945
9CMP	Charles	Polachek (Hon)	1919
W9YGX	David	Poland	1958
W9FNC	Roger W.	Ponto	1948
	Sister Melania	Popko	1980
K9ENB	Charles	Porch	1958
W9IZT	Robert	Porth	1934
W9WAC	Robert J.	Posanski	1951
W9EAN	Steve	Potandy	1945
W9VHP	Ralph A.	Potter	1951
KA9PZC	Mark	Prabucki	1984
9HD	Louis J.	Prahl	1919
9EHH	E. F.	Preuss	1922
W9NFY	Eugene H.	Price	1952
WA9JLU	Robert	Price	1964
W9NVQ	Wilber C.	Price	1941
W9CUS	Walter	Prichard	1961
9OV	Cornelius	Prinslow	1919?
K9DSE	Gary	Pritzl	1958
W9MLW	Rickard	Prokop	1980
K9BNM	Richard	Prunuske	1994
KA9FTH	Walt	Prybylowski	1983
N9NRJ	Brian	Pugens	1991
KX9M	Bill	Pulvermacher	2013
KB9OPT	Terry	Putchinski	1996
	C. F.	Quentin	1923
	John F.	Rachinsky	1942
W9RFN	William H.	Radermacher	1950
	Orville E.	Radke	1948
	Felix	Radwanski	1923
	Fred	Rahr	1946

W9IRC (W3GZY)	Rolland	Rahr	1959
N9AAI	Chester M.	Rainek	1978
9DEN	E.	Ralfsen	1928
KC9PXP	Frederick	Randolph	2015
	E.	Ranft	1933
KB9NCY	Robert	Ranney	1996
KA9SQU	Rodney	Ranney	1985
W9PH	Richard	Ranson	1976
W9GNW	John F.	Rashinsky	1942
WA9MOF	Allen	Rasmussen	1966
WD9GZS	Karl	Ratzman	1978
	Terry	Ratzman	1980
KE9LL	Joseph	Rayome	1987
WD9GZM	Glen	Rearick	1980
	Jeff	Rearick	1980
KC9CI (KA9FWN)	Phillip	Rebensburg	1980
KB9JBG	Fred	Recklies	1994
W9ZNE	Rev. Andrew E.	Redig	1948
W9FBT	Arnold J.	Redlich	1950
W9ZTP		Redlin	1937
	(Mrs.) R.	Reed	1930
W9PAS	William	Reed	1967, 1988
KE9KR (KC9BZU)	Kevin D.	Reemes	2002
N9KXA	Bradley	Reeves	2005
W9DLQ	James B.	Reeves	1948
KB9ZHW	Kelly	Reeves	2001
K9GDF	Richard	Regent	1958
K9JHS	Alfred	Rehorst	1957
	Eric H.	Rehorst	1948
W9AQZ	Andrew W.	Reichert	1945
W9CUZ	Walter	Reid	1963
KQ9M	Paul	Reinholz	1983
KN9GKF	Donald	Reinke	1958
W9ESO	Herbert J.	Reinke	1931
W9OXP	John	Reinke	1933
W9PTE	Lester R.	Reinmund	1934
K9CUI	Erwin	Reiser	1960, 1979
W3HR (W3ERS, 9ERS)	Harold R.	Reiss	1928
NY5N (KR8IVE)	Grant	Rettke	2017
	George	Reutenberg	1928
WA9VNJ	Steven E.	Reyer	1969
W9OUB	Norbert J. (Dick)	Richard	1935
K9BIW	Louis	Richards	1958
W9FVW	Delbert E.	Richardson	1945

W1JR (W9ARE)	Clyde C.	Richelieu	1945
	Robert	Richter	1950
K9WOC (KA9WOC)	Cheryl	Riedel	2017, 1986
K9FI (KA9AJF)	Gerald	Riedel	1979
N9YGA	Chris R.	Riedl (?)	1995
N9WIV	Christopher P.	Riedl (?)	1994
	Robert F.	Riedmueller	1948
NX9H	Duane C.	Riel	1988
	Joseph	Riess	1937
W9GMP	Gilbert Walter	Rink	1946
W9SIZ	Paul	Ripple	1942
AD9J	Al	Roberts	1981
W9ZBM	Earl	Robertson	1966
N9EAX	Michael	Robinson	1984
WB9AIS	Richard	Roblins Jr.	1969
	Joseph L.	Rockett	1923
WA9UVK	Herbert	Roehner	1979
W9NUE	Roger	Rogers	1977
W9ROM	Carl H.	Rohde	1941
W9FBD	Carl E.	Roliff	1948
	James	Rose	1923, 1937
W9VKC	Sidney R.	Rose	1941
	Alfred C.	Rosenau	1934, 1950
W9GHN	C.	Rosenbaum	1933
	James A.	Ross	1923
K9GKE	Robert	Ross	1964
KA9DHC	Norman	Roth	1983
W9OOA	Donald	Rotier	1952
K9DCC	Edith	Roush	1964
K9DCD	Robert	Roush	1957
W9BNQ	Walter	Rubin	1935
N9USA	Joe	Ruderer	1986, 1996
	Ronald	Rudolph	1980
KC9QV	Kenneth	Rugaber	1983
9DVD, W9DVD (W9VWG, WN9EHA)	George A.	Ruger	1928, 1934, 1971
KC9MJJ	Dwain	Runnells	2008
KA9WOD	Francis	Runte	1986
9AYA	Eugene W.	Ruppenthal	1922
KB9GQX	Norman	Russell	1991
W9MZZ	Fred	Russell Jr.	1942
WB9PKL	Marvin	Rutishauser	1978
WB9QIE	Michael	Ruzicka	1980
WI9NCC (KD9FPB)	Jennifer	Ryan	2016

N9SNB	Terrence	Rybacki	1994
W9WLD	August J.	Sabel	1946
	George J.	Sabljak	1985
	Robert	Sackett	1946
	Eugene	Sadowski	1980
K9OXH	Samuel	Saffro	1961
	Mike	Sajdowitz	1982
W9CTI	Chester	Sakura	1967
W9VDL	Louis	Salomon	1946
W9FTE	Richard	Sanborn	1958
KA9KIE	Flemming	Sandersen	1986
WA9LMR	Maurice	Sapienza	1964
KC9VAF	Bill	Satterlee	2012
(9ACK)	John	Sauer	1987
N9FAP	Emil	Sauler	1985
W4QED (W9UMX)	H. Ellis	Saxton	1948, 1958, 1976
W9GIL	John	Scarvaci	1933
K9CAN	Richard J.	Scarvaci	1956
	Robert J.	Schaack	1946
	Charles	Schaaf	1923
W9IFS	Frank	Schachtely	1950
N9HBN	Kelly	Schaefer	1986
K9IZV	Warren L.	Schall	1993
W9SQK	Cyril V.	Schallock	1942
KA9WXN	David	Schank	2006
WA9AKV	Richard	Schank	2017
KA9WFA	Skip	Schapiro	1986
W9FFC	Robert	Schefke	1978
	Robert	Schevers	1935
KA9MTY	Richard	Schlatterer	1982
KC9EPA	Sandra K.	Schlaugat	2003
W9SD (W9BSS W9NVH)	Walter C.	Schlaugat, Jr	1940
KB9JML	Bette	Schlesinger	1994
AA9OB (N9VMD)	George	Schlesinger	1994
K9RRW	Dick	Schmid	1964
WA9FBO	Robert	Schmid	1969
W9OYT	Robert John	Schmidli	1952
W9NLV	Armin C.	Schmidt	1952
W9DVD	Eugene	Schmidt	1958
W9ESR	Fred	Schmidt	1964
9CN	G. D.	Schmidt	1928
W7HAS	Howard A.	Schmidt	2015
KB9IIH	James A.	Schmidt	1995
W9LDO	P.	Schmidt	1933
W9VDY	Robert	Schmidt	1935
W9VZJ	Herbert G.	Schmitt	1935
W9DCS	Daniel C.	Schneeberger	2013
KC9QFU	Joseph	Schneider	2010
K9HJ	Herb	Schoeder	1980

W9RYR	Emmeth J.	Schoen	1952
	Elmer	Schoepfer (Hon)	1920
WB9HSW	Richard	Schoessow	1976, 1990
W9GCF	Robert	Schoessow	1958
9AKS	Otto	Schole (?)	1928
WD9GFV	John E.	Schram	1979
KC9YRT	Dale	Schraml	2013
	David	Schroeder	1994
AE9G (K8PRV, W9IKK, KB9BS)	Hans	Schroeder	1980
K9RW	Robert	Schroeder	1978
N9RXB	Wayne	Schrubbe	1982, 1994
	LeRoy	Schruber	1994
AB9EK (KB9RLB)	Thomas	Schulte	1999
9CDT	Werner	Schultrich	1928
KC9KER	Allen	Schultz	
	Armand	Schultz	1950
K9GOS	Carl	Schultz	1958
W9LZU	Curtis C.	Schultz	1942
W9ZUX	Elmer	Schultz	1937
W9MFB	Howard R.	Schultz	1950
KA9CAC	Walter	Schultz	1980
W9AFZ (9AFZ)	Freemont	Schunck	1927
K9BUU	James	Schuster	1956
K9KBL	Bob	Schwarz	1983
N9UX, KC9BGQ	Joseph	Schwarz	2003
	Max	Schwarze	1946
WB9ZKT	Steve	Schwendtner	1977
W9DWA	Paul	Schwietering	1958
	Ray	Scott	1948
KC9JWY	Robert	Scott	1994
	Vincent	Scott	1994
WA9HAH	Edmund	Scrip	1980
W9NLY	Frank J.	Seboth	1950
W9ESF (9ESF)	Donald E.	Seibel Sr.	1925?
KA9QLI	Raymond W.	Seidl	1984
W8WWA (W9EFX, 9FSS)	Frederich	Seifert	1928, 1934
	Robert G.	Seifert	1946
	Raymond	Seipel	1935
	William	Sell	1983
K9BEL	Ronald	Sengbusch	1958
W9KWV	C.	Senneff	1933
W9GKS	Frank	Sepic	1952

KE9JJ (W9LIU, N9DNM)	Edward A.	Seruga	1952, 1982
N9WXP	Phillip C.	Setzer	1994
KB9XR	Robert K.	Shady	1990
W9SQK	Cyril V.	Shallow	1942
W9UNJ	Patrick	Shanahan	1952
W9ANB	John A.	Sharpley	1945
AA9PC (WA9OKB)	Anton	Shemick	1971, 1980
N9UFJ	Thomas	Sherlowsky	1993
KB9ECA	Rod	Sherman	1986
KB9JBD	Leroy	Shuber	1994
	Curtis	Shultz	1942
KB4QXV	Bernard	Shuster	1986
KA9TWN	Carl J.	Sibilski	1985
	Donald C.	Sieckert	1951
KD9DZM	Kathryn	Siehndel	2017
KD9AUJ	Stan	Siehndel	2017
	Leon	Sikorski	1935
KA9SNV	Roland	Sikorski	1985
KA9IZV	Richard	Silberman	1980
9EHH (?)	A. J.	Simandl	1922
KD9FUI	Gordon	Sincock	2017
	Josia	Sincock	2017
WD9HOT	Leroy	Skalstad	2015
W9NTZ	James	Slamer	1994
W9AEM	John	Slatinshek Jr.	1958
WD9HXD	Matthew J.	Slavik	1991
W9NTZ	James	Slemer	1994
W9DZZ	Alexander	Smith	1945
N9CBS	Curt	Smith	2017
W9DYO	Edgar	Smith	1941, 1996
W9BTM	Evan (Van)	Smith	1955
KA9SQP	Frank J.	Smith	1985, 1996
KC9FMC	John R.	Smith	2008
W9SAA (KC9HEL)	Peter F.	Smith	2005
	Peter H.	Smith	1951
KD9IMX	Rita	Smith	2017
W9GWS	Ronald	Smith	1958
W9MBL	Scott	Smith	2016
KB9IQQ	Bob	Smitko	1994
W9KDZ	Anton	Smrekar	1964
W9ZAS	Russell	Sobozyk	1957
KA9ZZJ	George	Sohnle	1989
	Carle M.	Soldner	1949
	Jan	Soldon	2016
W9VLD	Louis (L. J.)	Soloman	1935
	Gilbert R.	Sonnenburg	1946
W9LIC	Richard	Soref	1950
LU8FGK/W 9	Arturo	Southam	1980

	Harry	Spangenberg	1952
K9AFN (W9AFW)	Leroy	Spanheimer	1930, 1958
WQ9A	Bill	Spellman	2015
	John	Spratler	1942
W9BLS	Barry	Sprifke	2017
W9JGE	Lester E.	Srnka	1933
W9MCU	Stanley	St. Onge	1958
W9MCU (WB9UEN)	Steven	St. Onge	2010
WB9HOB (WA9CNA)	Larry	Staats	1974
AA9VL	Clifford	Staeven	1996
W9JPK	Carl	Stanfield	1934
W9RAQ	Peter	Stanys	1945
K9RZB (KN9RZB)	Gary	Steele	1960
9IJ	A.	Steig	1928
W9LUE	Gary	Stein	1964
K9EUZ	Frank	Stellch	1957
K9KSA	Donald	Stenz	1964
W9PRA	Robert	Stephenson Jr.	1934
W9DIA	Terry	Sterman	1958
W9GAH (W9EAH)	Joseph H.	Stevens	1942
	John	Stewart	1935
KA9ONQ	Orv	Stewart	1990
KA9LDT	Herbert	Stich	1984
WA9RDI	Ted R.	Stiller	1979
	Werner	Stoehlker	1980
W9IWT	Elton V.	Stolberg	1948
	Otis	Stomner	1928
N9DIF	Brett	Stone	1982
	Romaine W.	Stone	1922
KH6HGJ	William	Stone	1976
K9ELH	Robert	Stonek	1964
	R.	Stoneman	1933
	Karl	Stong	1980
W9QC (AA9LW)	Jim I.	Stout	1996
W9SPS	Victor	Straessle	1948
	I. H.	Strassman	1922
W9KJW	Donald	Street	1958
W9KKX	Robert L.	Streeter	1946
KC6MWQ (W9NMA)	Arthur	Strege	1951
W9DC	Walter J.	Stromberg	1935
W9NHG	Harold E.	Strothmann	1941
KC9YRX	Mark	Strothmann	2014
W9ZAN	Eugene	Strzyzewski	1958
WA9SYD	Robert	Stuckert	1967
KA9DFZ	Joe	Sturmberg	1984
N9FSE	Steve	Sundquist	2005
W9UEP	Dave	Sutton	1956
	Ted	Swansen	1922

KB9Q	Sherm	Swanson	2000
NX1K	Mark	Swartwout	1998
W9NNV	Kendel	Swartz	1941
KA9NVY	Montgomery	Sykes	1982
W9GKZ	Rod	Synnes	1985
	Marion F. (?)	Szukalski Jr.	1922
WD9EFN	John	Tankersly	1997, 1982
	H.	Tarkow	1930
K9JT (K9ZYS)	James	Taylor	1966
WA9GJV	James A.	Taylor	1964
WD9EUF	Michael R.	Taylor	1982
AB9CD	Mark	Tellier	2001
	Ronald	Teofan	1956
W9MPV	Edmund	Terborg	1933, 1941
	Walter C.	Tesch	1928
9AEI	Dr. Rudolf A.	Teschan ( <b>Hon</b> )	1919
W9RYA	Vern	Teske	1964
W9HDW	L. G.	Thelaner Sr.	1950
	David	Thielen	1980
WA9LBO	Robert P.	Thielen	1979
W9WK	Caroll W. "Tommy"	Thomas	1937, 1948
W9SFH (WA9SFH)	Jerry	Thompson	1992
W9LJT	Joe	Thompson	1950
W9IRZ	Raymond A.	Thompson	1950
K9DBV	Terrence	Thompson	1980
K9JGT (W2BDV)	William	Thompson	1955
W9GER	Joseph C.	Thompson Sr.	1956, 1994
W9LFL	Carl	Thoms	1933
	James G.	Thomson	1952
W9MPV	Ed	Thorberg	1941
W9KIJ	Edward R.	Thornley	1942
W9WUX	Roual	Tice	1984
W9LUM	G.	Tillack	1933
W9RTZ	Howard	Timm	1950
WA9MJG	Mark	Timpany	1984
	Rudolf	Tischan	1919?
AA9VO (KB9NRP)	Robert	Tisdale	1996
W9KFM	John	Toennesen	1956
	Leo J.	Topolinski	1922, 1946
W9QFL	George R.	Toppe	1945
W9AYX	Jackie E.	Toppe	1948
K9ZPP	Bernard	Tower	1964
	Carl	Traudt	1922
	Arthur F.	Traurig	1950
W9KFB	Arthur A.	Trautmann	1945

WA9RYF	Howard	Traxler	1969, 2005
WB9SMP	Robert	Treptow	1982
W9TQ	Victor	Tresidder	1950, 1976
N9UNS	Bill	Tromblay	1993
WB9LNU (TG9JT, WB6SQR)	James	Tromblay	1991
N9UNT	James	Tromblay Jr.	1994
W9ITD	Ray	Truemner	1937, 1970
K9BCL	Masahiro	Tsuyoshi	2012
W9JBI	Chester F.	Tucholski	1930
KA9WQA	Rev. James J.	Tully S.J.	1986
W9GKT	Robert G.	Turner	1946
KA9PCB	Dr. Henry F.	Twelmeyer	1983
KB9YXB	Michael	Tyborski	2001
WA9ERI	Donald	Uecke	
WB9RYL	Edward F.	Uhl Jr.	1977
	Robert J.	Ulik	1946
KB9QZS	Floyd T.	Urbanski	1999
K9KGQ	John	Ureg	1983
	Harold	Utzerath	1923
W9VSO	Art F.	Vahovius	1946
K9UDS, KC9UDS	Tony	Van Der Wal	2011
	Charles	Van Hecke	1952
N9KHZ	Mike	Vande Bunt	1991
	Joseph	Vandreel	1949
WB9DHF	Michael	Varga	1996
W9LIO	Alan	Veed	1952
	Theodore	Verhaalen	1952
	Bernard	Verhalen (?)	1935
N9ARC	Edward	Vetter	1980
N9APE	Elizabeth	Vetter	1980
	Frank	Vetzelk	1942
KC9EGH	David J.	Vigue	1994, 2003
KA9CVL	Richard W.	Villa	1991
KG9II	Donald L.	Virlee	1993
KB9PSE	Michael	Vitale	2008
W9VDV	Kenneth	Voigt	1958
KA9QKQ	Lon	Voils	1989
W9PFQ	R.	Voit	1933
N9ZAI	Craig J.	Von Allmen	1994
WD9HAS	Skip	Voros	1983
	Robert	Wacker	1935
N9UR	Bruce	Wade	
WA9CGE	Gerald	Wahlen	2000
W9YYY	Clarence O,	Wahner	1946
WA9RYR	Thomas	Wait	1969
WA9MLL	Wells	Wait	1969
WB9RYK	Dale	Wakeley	1980

W9RXS	Irwin	Waldman	1958
N9BTK	Richard	Wales	1979
W9EYH	Walter	Wallace	1928, 1933
N9KWY	Christine	Walloch	1991
W9OBZ	Chester D.	Walters	1945
W9TRW	Tom	Wamser	2015
WA9JKD	Lloyd	Wantland	1969
9PCE	G.	Ward	1929
9BBW	T.	Ward	1928
KD9FU	Robert C.	Ware	1986, 1998
W9NY (9NY, 9AEX)	Herbert F.	Wareing	1922
W9NGV	Lowell	Warshawsky	1964
W9OLV	Leroy E.	Watson	1950
W9YGZ	Carl	Weber	1937
AB9DW (AC9EO, KC9SHB)	Dale	Webler	2011
WA9JOV	Raymond	Weeks	1965
	L. H.	Wegner	1922
W9ZQK (K14WV)	Gordon H.	Weiler	1970
KA9IZT	Matthew	Weiler	1983
W9HMO	Irvin A.	Weinman	1946
9OT	Wesley J.	Weiseman	1922
K9ISI	Bruce	Weitermann	1969
WD9GZL	Christopher	Welton	1977, 1995
	Oliver H.	Wendell	1922
W9YWK	Walter	Wenske	1935
WB6NOA	Gordon	West <b>(Hon)</b>	2015
KB9IIG	David	Wester	1994
	Thomas	Weston	1919?
	Walter	Wetzel	1923
K9IWC	C. Reid	Whipple	1978
K9LCQ (KB9LCQ)	Brian	White	1996
KC9KPS	David	White	
	Linda	White	1994
K9DNX	Joseph	Whiteside	1958
K9DQ	David	Whitham	2018
KL7AHQ/9	William D.	Whitworth	1952
KC9UDX	Matt	Widup	2012
	Arthur A.	Wienke	1952
	Duane	Wienman	2005
9CGD	William	Wierdsma	1922
	A.	Wiggert	1928
	Lance	Wikkeriuls	1922
N9BWT	Fred	Wilde	1979
KF9LG, N9JFA, KB9DNF	John	Wilhelm	1989
N9UFL	Pat	Wilken	1993

W9EEL	John D.	Wilkinson	1934
WA9WIN	Mike	Wilkinson	1969
W9PWG	Edward F.	Wille	1938, 1977
KH6EVK (K5CWM, W9EKU)	Eugene A.	Wille	1946
K9UML	Robert L.	Willett	1964, 1972
W9NHE	Ted	Willett	1967
W5IBH	Conrad	Williams	1952
	D.	Williams	1933
N9VNS	Randall P.	Williams	1994
W9YDO	Sid	Williams	1958
K4TGH (W9NAV)	Hugh	Wilson	1935
W9ZB	Robert	Wilson	1964
	Sister.M. Osanna	Wilson	1978
KB9YLF	Woodrow	Wilson	2001
W9EPO	William	Wing	1958
KB9FUZ	Earl C.	Winkel	1993
KA9MQV, KA3MQV	William J.	Winkler	1989
N9DKW	George	Winters	1983
		Wisconsin Radio Service <b>(Hon)</b>	1922
	W. J.	Wiseman	1922
N9KY (W9LUR)	William	Witt Jr.	1970
W9GLA	Charles	Wittkop	1950
N9HIL	Hence	Wofford	1986
AC9US	Mark	Wojnowiak	2012
WB9ZKV	Bob	Wolf	1980
W9CRK	James	Wolff	1937
KX6DC (W9ANA)	Louis A.	Wollaeger	1922, 1942
N9EYQ	Robert J.	Wolter	1983
W9DII	George J.	Wood	1922. 1935
W9JBE	Richard M.	Wood	2005
	Robert E.	Wood	1942
W9ROO	Arthur R.	Woolfolk	1944
N9ASA	Dan	Workenaour	2006
KC0RXY	Eugene	Worth	2005
W9UAM	Bernard	Wright	1946
W9AFT	Harlon E.	Wright	1948
N9FQH (KA9RLG)	Ed	Wroblewski	1984, 1989
WA9EMJ	Lillian	Wunsch	1983?
K9CIJ	Louis	Wunsch	1983?
KB9OSA	Richard	Wyble	1996
K4HXZ (W9SZH)	Dr. John F.	Wyman	1935

W9DOS	Sigmund J.	Wysocki	1945, 1956
W9FES	Joseph M.	Yech	1948
	Clarence N.	Yergens	1948
W9RLO	Ken	Yerkes	1972
	L.	Yurkowski	1934
W9KNZ	James O.	Zabel	1971
W9DIJ	Oliver E.	Zander	1933
NN9B (N9EYY, KA9RFI)	Bogdan A.	Zarski	1984
W9UVV	Roger C.	Zaun	1978
W9MGT	Leonore	Zavodnik	1951
W9BPR	Martin	Zavodnik	1945
	Russell G.	Zehetner	1942
K9CAG	Larry	Zentgraf	1957
KB9ZEX	Eric	Zentner	2001
	William	Zieman	1942
K9TTQ	Erich	Ziemann	1959
	Edward A.	Zigoy	1957
W9LBF	Harry	Zimdars	1957
WA9EPY	Ralph V.	Zimmerman	1990
AA9GB	Cory	Zito	2016
	Florence	Zolin	1957
W9ONY	Fred H.	Zolin	1937
KA9DUK	Barry	Zolo	1980
WD9HHI	Burt	Zuckerman	1978, 1983
W9UDK	George	Zurbuchen	1957
W9MQA	Herbert	Zwarra	1957
WN9NKB	Colin	Zylka	1974

## Silent Keys

(2019)

For any club a Silent Key list would obviously be as long as the all time member list. For a club in existence as long as MRAC (“one of the oldest radio clubs with some of the oldest members”) the list would be rather long. For now, it is just a beginning and is very short covering mainly the last 25 years or so along with some notable entries from years earlier. You may ask why list the people again? The list of Silent Keys is the last bit of respect the club can pay to past members (even if they were not members at the time of their passing). It may also try to make up for perhaps not mentioning the people through normal club channels when they did pass (which we were rather lax with in the 2000s).

The following list includes the year joined the club in parenthesis (where known). Hopefully, the year the person passed is correct.

As always, if you have any information for this list please let us know.

### 1946

Erwin Kreis W9HRM (1933)

### 1962

Joe Kircher W9NRX (1933)

Carroll Thomas W9WK (1937)

### 1967

Jack Doyle W9GPI (1937)

Emil Felber W9RH (1924)

### 1968

Walter Prichard W9CUS (1961)

W9OVW (????)

### 1972

Anthony Barszcz W9HPZ (1937)

### 1973

Clarence Crapo W9VD (9VD) (1918)

Louis Wollaeger KX6DC, W9ANA (1929, 1942)

### 1978

George Ruger W9DVD (1934)

### 1980

Norbert J. (Dick) Richard W9UOB (1937)

### 1983

Herb Wareing W9NY (9AEX, 9NY) (1922)

### 1986

Daniel Gellerup 9AOE (1917?)

Ray Klinkosh KA9GVW (1978)

John Toennessen W9KFM (1956)

### 1987

Don Seibel W9ESF (9ESF) (1925)

Walter Glish W9YYW (1957)

Raymond Weeks WA9JOV (1965)

### 1988

H. Charles Kaetel W9SNK (1946)

William Thompson K9JGT (1955)

### 1993

Richard Oberholtzer W9ZPV (1953)

### 1994

Aldrich Krones K9AA (W9CM, W9UIT, W9ELD)  
(1931)

### 1996

J. Travis Baird W9VQD (1932)

### 1998

Fred Kraus W9VLK (1938)

Phil Lehman KB9FOQ (1991)

### 1999

Raymond Gabik N9VME (1993)

Elmer Gutknecht (1982)

Robert Hetzel W9VQG (1956)

Jerry Melotik KC9EV (1980)

Sam Safro K9OXH (1961)

Dick Schlatterer KA9MTY (1982)

Terry Serman W9DIA (1958)

Orv Stewart KA9ONQ (1990)

Ed Wille W9PWG (1938, 1977)

### 2000

Ken Jacobchick W9CCZ (1946)

Carl Rohde W9ROM (1941)

John Scarvaci W9GIL (1933)

**2001**

Jack McLeland W9ATK (1964)

**2002**

Donna Cieszki N9INT (1991)  
Norm Russell KB9GQX (1993)  
Clifford Staeven AA9VL (1996)

**2003**

Thomas Gettelman W9IZO (1931)

**2004**

George Pfister W9IZQ (1939)  
Fred Recklies KB9JBG (1994)  
Evan (Van) Smith W9BTM (1955)

**2005**

Lester Gerlach W9UPM (1937, 1995)  
Arthur Strege KC6MWQ (W9NMA) (1951)

**2006**

Jack Pierce N9HIP (1988, 2000)

**2007**

Harry Cieszki K4VKW (KD9AJ) (1983)  
Jack Krause W9JK (W9UJM) (1948, 1971)  
Dick McNew WB9PTC (1978, 1996)

**2008**

Bessie Beider N9QIT (1991)  
Bill Brossman W9EQP (193?)  
Bob Fetterly N9HWB (1989, 2007)  
John Koehler W9DGB (1950)  
Brad Reeves N9KXA (2005)  
Bob Tisdale AA9VO (1996)

**2009**

Delbert Clark KA9ZMK (1987)  
Dave Knaus N9QA (WA9POV) (1971)  
Valorie Noldan WI9VAL (2005)  
Walter C. Schlaugat, Jr W9SD (W9NVH) (1940)  
Bill Witt N9KY (1970)

**2010**

Robert Denneay KA9AAB (2008)  
Douglas Pavek W9FDX (1948)  
Joe Rayome KE9LL (1987)  
Ed Seruga KE9JJ (1951, 1981)  
Sandra Schlaugat KC9EPA (2003)  
Edgar Smith W9DYO (1941)  
Vern Teske W9RYA (1964)

**2011**

Sylvester Janczak WD9JKZ (1980)  
Les Peterson W9YCV (1972)  
Roger "Ken" Rogers W9NUE (1977)  
Richard Scarvaci K9CAN (1956)  
Bruce Weitermann K9ISI (1969)  
Roger Zaun W9UVV (1978)

**2012**

Jan Dunham K9JLD (2010)  
Roman Hudzinski W9JPS (1938)  
Fred Linn W9NZF (as well as over the years W9ZOL,  
W2HWI, W2LTS, W0NZF) (1975)  
Kimbel Nap WB9AUE (1969)  
Jim Stout W9QC (AA9LW) (1996)  
Brian White K9LCQ (1996)  
John Wilhelm N9JFA (1991)  
Martin Zavodnik W9BPR (1945)

**2013**

Robert Schefke W9FFC (1978)  
Ken Eggert W9MOT (1948)  
Jerry Thompson W9SFH (WA9SFH) (1992)  
Roland Marks KD9Y (2008)  
Donald Uecke WA9ERI ()  
Ken Jaeger KC9MXZ (2010)  
James Fischer W9LPF (1935. 1944)

**2014**

Terry Koller KA9RFM (1984)  
James A. Markstrom KB9MMA (2012)  
Leon Rediske K9GCF (19xx)  
Herb Stich KA9LDT (1984)

**2015**

Everett Hokanson K9PSX (1964, 2001)  
John F. Lorbiecki K9WUF (1946, 1984)  
Gerald Wahlen WA9CGE (2000)

**2016**

Sus Musashi KB9OC (WB9BGJ) (1969)

**2017**

Charlie Dawson W9CUW (1939)  
Ralph Doll N9LAD (2012)  
Bob Glamm W9UGN (1935, 1968)  
Charles Grady KC9IIV (2006)  
Bill Howe KA9WRL (1986)  
Phillip Klein N9PK (2014)  
Howard Schmidt W7HAS (2015)

**2018**

Helmut "Buck" Buchwald K9RYW (1997)  
Jerome Dolezal W9NSC (1992)  
Larry McCalvy WA9JMO (1979, 2006)  
Norman McNew KB9QL (1993)  
Jeanne Pavek W9OMZ (1951)  
Robert Paquette (1982)

Steven Reyer WA9VNJ (1969)  
Joe Sturmborg KA9DFZ (1984)

**2019**

Rick Kissell WB9GYT (1993, 1995)  
Tom Murtaugh W9VBQ (1952)  
Robert Ranney KB9NCY (1996)