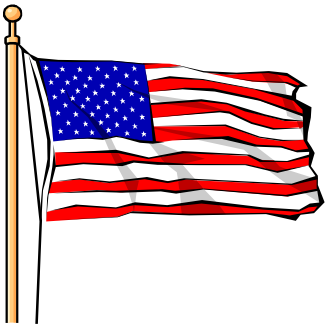
Sparks



Monthly Newsletter of the Tri-State Amateur Radio Society
January, 2007--Vol. LXI, No. 1
TARS Website: http://www.w9og.net Club repeaters: 146.79 and 147.15
Say "Hello" at the weekly Tri-State Emergency Net, 8:00pm Wednesdays on 146.79

The President's Corner

Well, here we are in 2007. I first got here in 1947, when things were quite different. I remember seeing my first television. It had a six-inch round screen. There was a cowboy movie playing. The television was in a wooden cabinet about four feet tall. Nowadays, a plasma television is only inches thick and hangs on a wall like a picture.

We have come a long way, and we can attribute a lot of that progress to radio amateurs. Early amateurs were always pushing the envelope, trying something new and improving what was already in use. A lot of our electronic goods came from the benches of these early amateur experimenters.

By their very nature, amateurs welcome new ideas and new technology. They have also welcomed new members into their fold and shared with them what they have learned. They encourage others to experiment and improve on technology.

Recent changes in regulations from the Federal Communications have made it easier for interested persons to join the amateur radio fraternity. With them, hopefully, will come new ideas and improvements on current technology.

A surge in license applications is expected when the code is finally not a requirement to obtain a higher-class license. This will mean more new members on our repeaters and more new voices on other modes.

Some of us old timers fear that reducing the requirements will reduce the quality of people in our hobby. Those who fear that the Citizen's Band potty mouths and asphalt cowboys will bring their trash to the ham bands saw the new requirements as the downfall of our sacred frequencies. (Have you listened to 75 meters lately? We can't throw stones.)

There is one thing positive we can do. It comes from an old saying, "You may not be able to control the situation, but you are in complete control of how you view the problem." You can get angry, pout, and predict doomsday for ham radio, or you can welcome the changes as an opportunity to meet new people with their new ideas.

You can also control how you represent ham radio to others. People learn by example. You are in a position to set the example. By human nature, everyone wants to fit in. If these newly licensed amateurs see well-behaved professional and friendly operators, they will act the same way. First impressions are very important. When you hear new hams on the air, talk with them. Make them feel welcomed. How many times have you read letters to the editor in QST from new hams saying that no one will talk with them on local repeaters?

These are very important first impressions. First impressions are lasting ones. The new hams will be listening to us and trying to fit in. You can mold the future of ham radio by setting only good examples. The new generation is looking to you for guidance.

73 Bob N9XAW

Calendar

JANUARY

3 Tri-State Emergency Net (Len, N9QVQ)
4 TARS Board mtg., 7:00pm, Red Cross Bldg.
10 Tri-State Emergency Net (Len, N9QVQ)
11 TARS club mtg., 7:00pm, Red Cross Bldg.; **annual auction--Don't miss this!**
17 Tri-State Emergency Net (John, N9OL)
24 Tri-State Emergency Net (John, N9OL)
27 ARRL exam session, 9:00am, Red Cross Bldg.; bring original and one copy of current license, any previous exam credits, two ID's (one with photo), SS or TIN number, and $14.00; for additional information contact Terry, AA9MM (812-401-9632 or tbrooks @sigecom.net).
31 Tri-State Emergency Net (Norm, W9AU) Renew by the 31st to get your TARS callsign/name badge.

FEBRUARY

1 TARS Board mtg., 7:00pm, Red Cross Bldg.
7 Tri-State Emergency Net (Norm, W9AU)
8 TARS club mtg., TARS Annual Banquet, east-side Golden Corral, 6:00pm
14 Tri-State Emergency Net (Chris, KE9YK)
21 Tri-State Emergency Net (Chris, KE9YK)
24 No ARRL exam session (which would have been on this day) for February.
28 Tri-State Emergency Net (Terry, WB9KQF)

Winter Field Day

Winter Field Day is scheduled for Saturday, January 13 at the East Side Church of God, located at the intersection of Alvord and Culverson in Evansville. Set up will begin at approximately 10:00 AM. Operation will begin at 12:00 noon and run until sometime in the evening. Boy Scouts will be assisting with the setup and operation. There will be a planning session January 4 just prior to the TARS board meeting for those who are interested in helping out with equipment or supplies.

Please contact Brian Esche WB9QVR via e-mail at besche@sigecom.net if you would like more details. Everyone is encouraged to attend the Winter Field Day operation–bring along a friend and make some contacts!

Weather Spotter Training

The Tri-State Amateur Radio Society, in partnership with the Evansville/Vanderburgh County Emergency Management Agency, is again offering free weather spotter training in 2007. We are hosting both a weekday evening and a Saturday morning class to better fit into your busy schedule. As in the past, this is free training courtesy of the National Weather Service, Paducah Kentucky. Both training sessions will be held at the Evansville Public Library, Central branch Browning Room, located at 200 SE Martin Luther King Jr. Blvd. The Saturday class will by on January 27th, 2007 from 9:00 AM to 12:00 noon; the weekday class will be January 31st, 2007 (Wednesday evening), from 6:00 PM to 9:00 PM. Both classes will meet in the Browning Room of the Evansville Public Library, Central Branch, located at 200 NW Martin Luther King Blvd.

Well-meaning citizens often call in erroneous reports in good faith. They report funnel-shaped clouds as being tornados, even if no rotation is observed. You will be trained on what to look for and what information is crucial to accurate forecasting. Each trained spotter will receive a spotter number and access to the toll-free reporting numbers at the National Weather Service. Mr. Ron Fields, of the National Weather Service, will provide instruction. Pre-registration isn't necessary. Just show up!

The training covers:

. Basics of thunderstorm development
. Fundamentals of storm development
. Identifying potential severe weather features
. How to report information
. Basic severe weather safety

Ham News

FCC ELIMINATES MORSE CODE AS EXAM REQUIREMENT!

Early next year, the US will join the growing list of countries that no longer require Amateur Radio applicants to pass a Morse code test as the entry ticket to HF. Announcement of the pending historic rule change arrived with no fanfare December 15 in an FCC public notice. A full-blown Report and Order (R&O) in the proceeding, WT Docket 05-235, followed December 19. The best estimate of when the Morse code requirement

will go away officially is sometime in February -- 30 days after the R&O appears in the Federal Register.

"We . . . believe that the public interest is not served by requiring facility in Morse code when the trend in amateur communications is to use voice and digital technologies for exchanging messages," the FCC said in its R&O. "Rather, we believe that because the international requirement for telegraphy proficiency has been eliminated, we should treat Morse code telegraphy no differently from other Amateur Service communications techniques."

The FCC says it deems the current regime of written examinations "sufficient to determine whether a person is qualified to be issued an Amateur Radio operator license."

The FCC cast aside arguments that Morse ability is advantageous in emergencies, concluding that most emergency communication is handled using voice, data, or video techniques. The Commission also turned away assertions that retaining a Morse requirement would help keep out the bad apples.

"The record is devoid of a demonstrated nexus between Morse code proficiency and on-the-air conduct," the FCC observed. It concurred with one commenter's observation that "maintaining the code requirement does not purge Amateur Radio of bad operators. Education and self-policing does."

The FCC also ordered that all Technician licensees present and future – whether or not they've passed a Morse code test, will get privileges on 80, 40, 15 and 10 meters identical to those of Novice licensees. "In eliminating this disparity between Technician and Technician Plus licenses, we are simplifying the Amateur Service licensing structure and promoting regulatory parity," the FCC said.

The FCC took advantage of the occasion to act on the League's Petition for Partial Reconsideration in the "omnibus" proceeding, WT Docket 04-140, calling on the Commission to retain 3620 to 3635 kHz for automatically controlled digital stations by moving the Extra class phone band edge to 3635 kHz. The FCC decided instead to authorize 3585 to 3600 kHz for such operations, and leave the newly expanded phone band intact.

The Commission further amended Part 97 "to authorize Amateur Extra class privileges to all individuals who have been issued a CEPT radio-amateur license by their country of citizenship, and who satisfy other requirements in the Commission's rules."

Although the FCC's Morse code decision came as no surprise, it nonetheless revived debate on the issue. The FCC had proposed more than a year ago to drop the Morse code requirement for all license classes. The record in the proceeding, the FCC said, "reflects a division of views in the Amateur Radio community." After reviewing the more than 3500 comments and counter-proposals radio amateurs had filed, the Commission stuck with its initial proposal.

ARRL President Joel Harrison, W5ZN, had this reaction: "While the Commission's decision to delete the Morse code requirement for an Amateur Extra Class license departs from the ARRL's recommendation, it is helpful to have the matter resolved so we can move forward."

ARRL CEO David Sumner, K1ZZ, expressed a similar viewpoint. "Now that the debate is over, we can focus on learning Morse code simply for its own sake," he said. Sumner pledged that the League would maintain its traditional support of Morse code as an operating mode and would continue to offer Morse training materials as well as such incentives as bonus credit for CW contacts in ARRL-sponsored operating events. ARRL's Hiram Percy Maxim Memorial Station W1AW will keep its schedule of Morse code practice and bulletin transmissions.

Since World Radiocommunication Conference 2003, the UK, Canada, Germany and other countries have dropped their Morse requirements. Sumner said other countries have successfully made the transition to a codeless testing regime, and he doesn't anticipate problems in the US.

The pending disappearance of the Morse code requirement seems to have rejuvenated the urge to upgrade. ARRL Sales and Marketing Manager Bob Inderbitzen, NQ1R, says distribution of General Class license training materials have skyrocketed in the week after the FCC announcement.

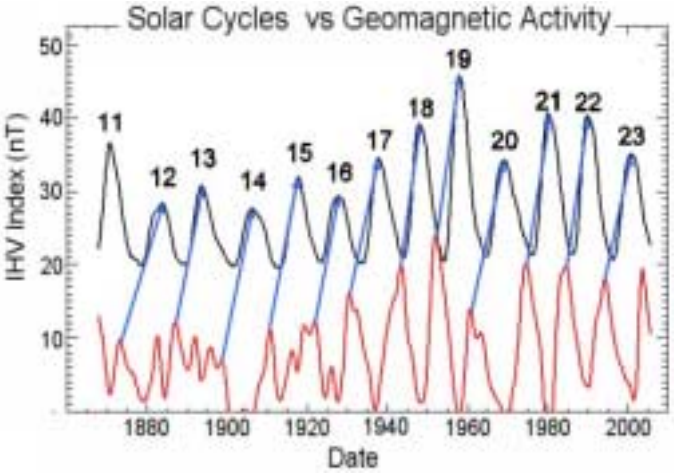
The ARRL has posted information relevant to the FCC action in WT Docket 05-235, including an FAQ, on its Web site <http://www.arrl.org/fcc/morse/>.

EVIDENCE IS MOUNTING: THE NEXT SOLAR CYCLE IS GOING TO BE A BIG ONE

Solar cycle 24, due to peak in 2010 or 2011 "looks like its going to be one of the most intense cycles since record-keeping began almost 400 years ago," says solar physicist David Hathaway of the Marshall Space Flight Center. He and colleague Robert Wilson presented this conclusion last week at the American Geophysical Union meeting in San Francisco.

Their forecast is based on historical records of geomagnetic storms. Hathaway explains: "When a gust of solar wind hits Earth's magnetic field, the impact causes the magnetic field to shake. If it shakes hard enough, we call it a geomagnetic storm." In the extreme, these storms cause power outages and make compass needles swing in the wrong direction. Auroras are a beautiful side-effect.

Hathaway and Wilson looked at records of geomagnetic activity stretching back almost 150 years and noticed something useful: "The amount of geomagnetic activity now tells us what the solar cycle is going to be like 6 to 8 years in the future," says Hathaway. On the graph below, the upper, black curve shows solar cycles and the lower, red curve shows geomagnetic indices, specifically the Inter-hour Variability Index or IHV; peaks in geomagnetic activity (lower curve) foretell solar maxima (upper curve) more than six years in advance. "These indices are derived from magnetometer data recorded at two points on opposite sides of Earth: one in England and another in Australia. IHV data have been taken every day since 1868," says Hathaway.



Cross correlating sunspot number vs. IHV, they found that the IHV predicts the amplitude of the solar cycle 6-plus years in advance with a 94% correlation coefficient. "We don't know why this works," says Hathaway. The underlying physics is a mystery. "But it does work."

According to their analysis, the next Solar Maximum should peak around 2010 with a sunspot number of 160 plus or minus 25. This would make it one of the strongest solar cycles of the past fifty years, which is to say, one of the strongest in recorded history.

Hathaway points out that there are actually two types of geomagnetic activity:

1, storms caused by the gentle buffeting of solar wind streams and

2, storms caused by the more forceful impact of flares and coronal mass ejections (CMEs).

"Only the first type has predictive value," says Hathaway. "Storms caused by solar wind streams come and go in a regular pattern that foretells the solar cycle. Storms caused by flares and CMEs don't have this property."

These results are just the latest signs pointing to a big Cycle 24. Most compelling of all, believes Hathaway, is the work of Mausumi Dikpati and colleagues at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado. "They have combined observations of the sun"s 'Great Conveyor Belt' with a sophisticated computer model of the sun"s inner dynamo to produce a physics-based prediction of the next solar cycle." In short, it's going to be intense. Details may be found in the Science@NASA story Solar Storm Warning.

It all hangs together," says Hathaway. Stay tuned for solar activity. [Article by Dr. Tony Phillips, downloaded from Science @NASA]

One Man's Opinion

Where has this year gone? It certainly feels like we just started on club activities for 2006, and now we have brought them to a close. Our club has progressed over the last twelve months, and we are continuing to bring in new ideas, new members, and new board members and officers.

This year, although a little stressful for me during the summer months due to my wife having major surgery, it came to a wonderful ending. As most of you know, I reached that plateau in life and am now a “retiree” and loving it.

I have time to devote to club activities, ham radio, music collections, reading, working on major projects, and in general just enjoying life. My wife and I have attended several events in the last few weeks. It was a big relief to not have to carry a cell phone and worry about some major problem involving work that would require me to leave the event.

In the last few weeks I have lined up programs for our club meetings, and it looks like we have programs scheduled until at least April. However, I know that more of you have things to share about ham radio with other club members. We would like to hear from you about your ham activities, antenna design or installation, involvement in emergency operations, construction projects and other items of interest.

In the editorial page of QST for November 2006 Dave Summer, K1ZZ stated that ham radio has never been more exciting. I agree with that observation. We have many modes, new frequencies recently allotted for SSB, and the possibility of expanding our present bands is possible within a few years.

When I first entered ham radio in 1956 there were two modes to operate, AM and CW. Look how things changed over the years. We have many more areas where you can find your little niche in ham radio–digital, SSB, CW, Moon bounce, FM, HF, VHF, satellite, and the list seems to go on forever. A new year is just around the corner, and I am looking forward to reassembling my beams, and getting them back in place after a devastating storm last summer.

I miss working the DX stations, and chatting with people on the other side of the world. This is my little area of ham radio. I miss the DX contests and Sweepstakes. Contesting is another part of ham radio I really love. Six meters–yes, that's, another challenge. I still want to nab that last state I need on that band. When I do that you will hear a loud "YES!" from the south side of the Ohio River.

A new year, new challenges, new modes, new areas to explore–can't wait to get back in the main stream of things again. This time, I put up the tower to stay up forever. I hope! Have a great 2007 my friends. Enjoy ham radio; you will be glad you made some memories. As always my friends, this is "One Man's Opinion."

73 Bill K4LRX

Secretary's Report

Minutes are not provided in the complimentary and web based editions of Sparks.

Treasurer's Report

TARS membership renewals for 2007 are coming in. Remember that if you are over 65 or disabled, your membership is only $12.50. Students can join for free (but it's $12.50 if you want voting privileges). See John N9OL if you have questions about whether you have paid. He will have a current list at the January meeting. At the Annual banquet in February, all current members will receive their very own TARS name and callsign badge. In order to receive one, members must pay their dues by January 31st. A membership application is attached to this issue of Sparks.

One more reminder about ARRL memberships. Did you know that if you renew/join ARRL through TARS that it will help us out financially!? ARRL is one of the most active voices for amateur radio, from public relations to watching developments at the FCC, to pushing for laws that benefit amateur radio. If you renew or join ARRL through TARS, they let us keep $2 of your normal $25/year ARRL membership. And most impressively, if you are a new member of ARRL and join through the club, we get to keep $15 of your first years dues here for introducing you to ARRL. Forms are available from the treasurer, so think about it when you join/renew your ARRL membership.

Birthdays for January

N9TIQ Don Bender (5th)
K4LRX Bill Hilyerd (11th)
N9QVQ Len Schmitt (12th)
WB9JVP Leonard Delgman (13th)
KB9LXZ Joanne Alexandrovich (14th)
KC9GYI Ed Masters (14th)
KB9IJI Andy Justison (19th)
KE4W Dave Berry (27th)

Budget for December 2006

The detailed budget is not provided in the complimentary and web based editions of Sparks.

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