



TMRA Amateur Radio Beacon

The Toledo Mobile Radio Association is an ARRL Special Services Club Serving Northwest Ohio Since 1953



December 2005

The Prez Sez:

Welcome to the Happy Holidays edition of the *Beacon*! I'm starting to write this article before Thanksgiving and though you'll be reading it after the holiday, I hope it was enjoyable for you and yours. The same goes for the other upcoming holidays... Merry Christmas and Happy New Year! Make sure to get signed up for the TMRA's annual Christmas Party in lieu of our December General Meeting on the 14th. I hope that everyone is planning to attend this festive Club sponsored event. There should be more information in this month's newsletter along with the RSVP details.

Also in this issue of the newsletter you should find a second application for membership with the TMRA, and you should be saying to yourself: 'I already sent in my membership application, what should I do with this extra one?' Well... I have the answer for you! First, make sure that you did in fact already use the last one, then when you find out that you did, pass this new form on to a friend and entice them to join in the fun too! See how easy that was? Check with me if you need more information. And keep in mind, it's not too late to get entered in the drawing for a free membership for 2007!

Thanks to the Club members who participated in a special election process at the November General meeting, we now have our two vacant trustee positions filled. The new trustees are as follows: Bob Hanna, K8ADK will sit for the two year term which ends September 30, 2007 and Steve Stalker, KC8TVW will fill the position for the five year term ending in 2010. Congratulations to our new trustees, and thanks to those others that ran for the positions but were not elected.

I'd like to mention something in regards to the Fort Wayne Hamfest. I only went on the Sunday of the two day event. Though I heard from someone that Saturday's attendance seemed to be okay, I'm afraid to say that I think the attendance for Sunday was way down. Also, I don't believe that I saw anyone from our Club there, but I still hope that we did show up to support them. I'm pretty certain that some of them still come to support our Hamfest. So, let's hope that this lack of attendance won't be a trend of things to come. Talk up our Hamfest and the Amateur hobby in general, it's not as much fun if you keep it to yourself. Let's get on the air and stir up some excitement!

73 de KB8PAI,
Tom Swartz, President and Membership Chairman
kb8pai@arrl.net

ARRL Membership Renewals Through TMRA

The ARRL has announced it has reinstated the ARRL Renewal Membership Compensation Program to renewing ARRL members through Affiliated Clubs such as TMRA. So, if you would like to renew your ARRL Membership through the club at no additional cost to you, and helping the club receive a \$2.00 compensation for every renewal see Treasurer, Chuck Ferguson, N8NIR, for the special forms needed

How would you like to work a repeater with a “300 mile high” antenna?

By: Steve / kb9ups

How you ask? It's easy, amateur radio satellites! Some time ago a small group of folks got together and started AMSAT, The Amateur Satellite Corporation. AMSAT is a non-profit volunteer organization which designs, builds and operates experimental satellites and promotes space education. They work partnership with government, industry, educational institutions and fellow amateur radio societies. They encourage technical and scientific innovations and promote the training and development of skilled satellite and ground system designers and operators.

How many of these “orbiting repeaters” are there? There are currently fourteen operational birds in several modes of operation including voice, digital and even SSTV. There are even satellites that YOU can down load weather pictures just like the National Weather Service does ! All of this can be done with out adding much more than you have in the shack right now, I'll even go as far as saying most of you have what it takes to get on the “easy sats” right now.

Interested yet? Then lets get started. The first thing you will need to know is when and where to listen for a satellite and that will take some type of tracking program. There are many such programs both freeware/shareware and others that can be down loaded and then registered. Some of interest are WinOrbit 3.6, SatTrak, Instatrack for those die hard DOS folks and my favorite Nova for Windows. There are several of these listed on my web page at: www.qsl.net/kb9ups and the AMSAT web page at: www.amsat.org for starters. Once you have a tracking program up and running, it's time to tune in and see what you've been missing with that first class of amateur radio licence, that's right, the technician class ticket takes you all the way up through microwave communications.

Now lets look at what will be needed in equipment for satellite operations. All of the “birds” use two different bands, one for uplink and one for downlink so a “full duplex” rig is defiantly the best way to go, but it can be done with two separate rigs as well. For now we will start with a rig you most likely have right now, your mobile dual band. Most dual band rigs have up to one hundred memory sets and by now you have done some searching and found the frequencies needed for the satellite of choice. I should mention before getting to far along, we'll be using the omni antennas all ready on your car or at your QTH.

For this example we'll use AMSAT-OSCAR 27 (AO-27). AO-27 uses mode V/u or 2 meters up and 70 cm down. The target frequencies (mid-band) are 145.850 MHz up and 436.795 MHz down both FM and yes some satellites use split mode too, more on that later. Lets build a memory chart to depict what we will be programing into our rig. Start with five memory spots for both bands and use the target frequencies as the middle for both, then starting with the 2 meter band numbers one through five, remember that number three is our target of 145.850 MHz. Program the remaining sets at 5 KH each, smaller shifts if possible, number two at 145.845 MHz and number one at 145.840 MHz. Then number four at 145.855 MHz and number five at 145.860 MHz. Now to program the 70 cm band the same using the target frequency as number three. The difference here is “Doppler shift”. Doppler shift is the observed frequency difference between the transmitted signal and the received signal on a link where the transmitter and receiver are in relative motion. Also, the satellites use liner transponders some in reverse mode, more on that one later, but this is how it looks. Program number two at 436.800 MHz, number one at 436.805 MHz, number four at 436.790 MHz and last number five at 436.785 MHz. In doing this it should be easy to keep track of where you are by starting to listen on memory (1) and as the satellite comes and goes keep moving down your list. It should all look like this:

Memory	2 meter	70 cm
Ch. 1	145.840	436.805
Ch. 2	145.845	436.800
Ch. 3	145.850	436.795
Ch. 4	145.855	436.790
Ch. 5	145.860	436.785
	TX	RX

AO-27 is semi-operational at this time so it is only turned on during acceding passes, that is when it passes over the equator form south to north. That makes the pass times early evening.

"Terms YOU NEED to know"

Here is a short list of terms you should become familiar with in satellite operations.

AOS – acquisition of signal

Apogee – Point on orbit where satellite height is maximum.

LOS – loss of signal

Acquisition circle or Foot print – “Circle” drawn about a ground station and keyed to a specific satellite. When the SSP is inside the circle the satellite is in range.

Sub-satellite point/SSP – Point on surface of Earth directly below satellite.

Orbital elements – Set of six numbers specified at particular time (epoch) that completely describe size, shape and orientation of satellite orbit.

HEO – High Earth Orbit

LEO – Low Earth Orbit

Node – Point where satellite ground track crosses the equator.

Perigee – Point on orbit where satellite height is minimum.

I hope I have made it possible for those interested in learning more about satellite operation to find your self looking for more answers. With that don't hesitate to call or stop by the QTH and work some birds together...73's for now and I'll see you, “on the birds”.

Steve/kb9ups

www.qsl.net/kb9ups

Winners Announced In Contested ARRL Director, Vice Director Races

Ballots in contested elections for ARRL Director and Vice Director seats in the three divisions were counted November 18 at ARRL Headquarters. The Committee of Tellers has certified the results of these contested elections for the 2006-2009 term.

In The Great Lakes Division: Incumbent Director James E. "Jim" Weaver, K8JE, of Mason, Ohio, was elected to a second term. By a vote of 3505 to 883, he held off a challenge from Neil Sablatzky, K8IT.

Returning to the back bench will be Former Great Lakes Division Director and Vice Director Gary L. Johnston, KI4LA, whom Weaver defeated in a three-way race for Director in 2002. Johnston had served for about six months in the division's top spot that year following the resignation of former Director George Race, WB8BGY. Johnston outpolled Daniel M. Romanchik, KB6NU, the only other candidate for the Vice Director's slot, 3033 to 1263. Current Great Lakes Vice Director Richard Mondro, W8FQT, did not run for another term.

From ARRL Bulletin 28 ARLB028

Highlights From December "Weaver's Words"

New assistant director position established

One of the greatest problems to face Amateur Radio today is developing interest in our great service among non-hams. This is especially true among young people. During the just-past Director elections, my then-opponent Neil Sablatzky, K8IT and I pledged to continue to seek new and unique ways to attract young people. After the results of the election were reported I telephoned Neil to discuss his views on searching for new blood. I am happy to report that he has accepted appointment to the newly-established position of Assistant Director -- Recruiting Development for the Great Lakes Division. Please welcome Neil as the newest member of the Division Staff.

Scholarships available

I want to point out that there are a variety of scholarships available through ARRL. These may be awarded by ARRL, administered by ARRL on behalf of clubs or administered by the League on behalf of bequests. To check into these, go to www.arrl.org and search for scholarships.

Board of directors meeting

The Annual Meeting of the ARRL Board of Directors will be the middle of January in Windsor, Connecticut, just outside of Newington. Please let me know as soon as possible of any matters you'd like me to bring to the attention of the Board.

Logbook of the world (LoTW) opening to WAS

LoTW is a log matching program developed by ARRL to reduce the cost of QSLing. It is fully operational for all awards in the DXCC family. As of November 23, 883,804,248 QSOs had been entered into the system with thousands of matches between station logs having been confirmed. With QSOs matched through LoTW, it is not necessary to mail cards between stations to confirm contacts; thereby saving postage and printing expense.

LoTW is scheduled to become accessible for the WAS family of awards by early January at the latest. It is anticipated that still additional ARRL as well as non-ARRL award programs will be available through LoTW later this year.

To learn about using LoTW, go to: <http://www.arrl.org/lotw/>. There is no charge for entering QSO data into LoTW. There is a small fee for redeeming credits through it.

HAPPY HOLIDAYS

I hope each of you and your families had a very enjoyable Thanksgiving, and I wish you a very Holy Hanukah, Joyful Christmas and Happy New Year.

73, write to me any time.

Jim Weaver, K8JE, Director

5065 Bethany Rd., Mason, OH 45040

E-mail: k8je@arrl.org; Tel: 513-459-0142

ARRL Great Lakes Division

ARRL, the Reason Amateur Radio is!

Members, the Reason ARRL is!

<p>The TMRA <i>Amateur Radio Beacon</i> is published monthly by the Toledo Mobile Radio Association. Editors: Brenda, KB8IUP, and Chuck, KB8FXJ. Email, kb8iup@arrl.net</p>

UK Radio Amateurs Don't Want Lifetime Licenses

UK radio amateurs don't want lifetime licenses, poll indicates: The majority of the United Kingdom's radio amateurs want to keep the existing Amateur Radio licensing structure or have longer license terms rather than switch to a license that's good for life. That's one conclusion of a MORI poll commissioned by the Office of Communications (Ofcom), which regulates Amateur Radio in the UK. The survey of 1572 hams also revealed that two-thirds of the respondents believe the current licensing structure to be "about right." The Radio Society of Great Britain (RSGB) points out that the poll does not represent the conclusions of Ofcom's still-pending consultation into the future of Amateur Radio but "just one small part" of the overall process. "Ofcom is keen to issue Amateur Radio licenses for life," the RSGB said. "But 52 percent of respondents to the survey said they prefer either the existing arrangement or an extended renewal period." The RSGB said the lifetime license proposal was even less popular among its members, with around two-thirds favoring the current arrangement or longer terms. Of those who wanted longer license terms, 60 percent preferred a five-year renewal period, the Society reported. Only 1 percent of those surveyed said they wanted to abolish the licensing arrangement altogether.

From The ARRL Letter, Vol 24, No 45 November 18, 2005

Minutes of the TMRA General Meeting – 11/9/05

The meeting was called to order at 1948h by President Tom, KB8PAI with 37 members and 1 guest present. The sign-in sheet is on file with the Secretary's copy of the minutes. After the Pledge of Allegiance, those present introduced themselves.

The business meeting started with review of the minutes of the 10/12/2005 meeting: Treasurer Chuck, N8NIR presented an up-to-date Treasurer's report, a copy of which is on file with the Secretary's copy of the minutes.

President Tom, KB8PAI reported currently we have 207 members. Roster has been mailed out. The November Executive Committee Meeting has been cancelled. The December general meeting will be the Christmas party.

VP Steve, W8TER thanked those who volunteered to run for officers or trustees. He has club stickers available. He is looking for volunteers for the Nov. 25th Maumee 5K race and the following parade.

Technical Committee: Chuck, N8NIR is working on a problem with the 2m repeater, checking the amp.

LCARES: James, WD8IOL gave a detailed report of the 10/22/05 LCARES meeting

Hamfest: Brian, WD8MXR said that he's planning a HF committee meeting for 11/12/05 7:30pm; Brenda has tickets available.

Programs: Jim, KC8BAA thanked all who have helped; he is resigning the chair and we need a new chairperson.

Christmas Party: Pat, KC8WQU said the December Newsletter will have a reservations form for the Christmas party.

"Flowers" A "Get-Well" card was sent on behalf of the club to Pat, KC8WQU after her surgery.

New business:

Mike, WA8SYD, enquired as to whether the Dx cluster was still up: Dan, KE8UE commented that some spots are mentioned on the TMRA BBS.

Chuck, N8NIR, reminded members about the ARRL membership renewal through the Club. There was some general discussion about supporting ARRL – all favorable.

Balloting then took place for the vacant trustee positions: Bob, K8ADK, was elected to fill the 2 year position. Steve, KC8TVW was elected to fill the 5 year position.

With no further business, a motion to adjourn was made by Dan, KE8UE, seconded by Al, KC8MC, motion passed and the meeting was adjourned at 2150h.

Respectfully submitted
Brian, WD8MXR, Secretary.

OTHER TOLEDO AREA AMATEUR RADIO ORGANIZATIONS

ARES

Lucas County Amateur Radio
Emergency Service meetings are held on the 4th Saturday of the month in the "Private Dining Room" in St. Luke's Hospital, at 9:00 AM. You are welcome to meet in the cafeteria for breakfast before the meeting. Alternate meeting locations and information will be announced on the daily 6:40 PM net. Contact Brenda, KB8IUP at 419-866-5928. **ARES NTS and Training Net** meets daily at 6:40 PM. 146.940- Alternate frequencies are: 147.375+ or 147.270+.

SKYWARN Net as needed by the NWS, 147.375+ Alternate frequencies are 146.940-, 147.270+ or others announced by "net control".

GTARA (146.610-) Meets on the 3rd Tuesday of the month at the Red Cross Building, 3100 W. Central, 7:30 PM. Contact Martha, K8AAC.

SARA Meets on the 2nd Tuesday of the month at the Springfield Twp. Hall, 7617 Angola Rd. at 7:30 PM. Contact Tom, N8MAV, 419-826-7401.

TRAC (147.375+, 146.940-) Meets 1st Thursday of the month at the Springfield Twp. Hall, 7617 Angola Rd. at 7:30 PM. Contact Terry Caldwell, KC8HQB, 419-874-2173.

QCWA Chapter 142, meets on the 2nd Saturday of the month at The Big Boy Restaurant, 1402 Reynolds Road, Maumee. (next to Hampton-Inn hotel) Contact Paul Lentz, K8PL, 419-882-5906. Or email, pelentzk8pl@juno.com

FRAT (52.360, 146.835-, 224.280-, 444.650+) Meets on the 1st Tuesday of the month. FRAT net follows the Rain Dialup and Amateur News Weekly on Thursday nights starting at 8:30 PM.

Edited for publication by kb8fxj

TMRA
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HAVE A SAFE AND HAPPY HOLIDAY SEASON

December 2005

LCARES Truck And Trailer Clean-up

On Saturday, November 12, a small group of local hams met at the Fire Station #1 for cleaning and maintenance on the LCARES truck and trailer. In addition to the needed cleaning, (inside and outside) they also replaced a defective 2 meter antenna, stowed all the equipment where it is supposed to be and measured the interior of the truck for installation of the ACU-1000 next year. A big Thank You goes to: Bob, K8ADK; Martha, K8AAC; Bob, N8AJP; Mike, WA8SYD; Ron, N8APZ and James, WD8IOL.

Brenda and Chuck,
KB8IUP and KB8FXJ

THE TOLEDO MOBILE RADIO ASSOCIATION P.O. BOX 9673, TOLEDO, OH. 43697-9673
President, Tom, KB8PAI; Vice-President, Steve, W8TER; Secretary, Brian, WD8MXR;
Treasurer, Chuck, N8NIR; Public Information Officer, Steve, KC8TVW.

Board Members: Dave, KB8EH; Ed, WA8BHO; Scott, N8BIR; Howard, W8NEE; Bob, K8ADK; Steve, KC8TVW.

TMRA Home Page www.tmrahamradio.org Webmaster, Becky, KC8ZNX.

TMRA W8HHF Repeaters; 29.680-, 147.270+, 224.140-, 442.850+ (TMRA 2 meter, 220, and 440 repeaters operate with a 103.5 "PL", or a touch-tone access code of 1-2-3) Please "ID" before using phone-patch.
(10 digit dialing, *up and #down)

TMRA W8HHF Packet BBS Frequencies 51.780, 145.690, 223.480, 441.060

The TMRA meets at 7:30 PM every second Wednesday in
The Electrical Industry Building, Lime City Rd. Rossford, Ohio.

The TMRA Q & A net meets every Sunday night at 7:30 PM, followed by the TMRA "Information & Swap 'N-Shop" net at 8:30 on the 147.270+ repeater. All amateurs are invited to check-in. *TMRA Voice Mail 419-535-6594*