



April 2021  
Volume 59 Issue 4

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<http://www.w1mv.org>



<https://www.facebook.com/w1mvmaral/>



<https://twitter.com/search?q=Massasoit%20Amateur%20Radio%20Association&src=typd>

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**Next meeting is April 20, 2021 at 7:00pm via Zoom Meeting – to join the next meeting contact Allen. This may be in person, if that is the case, we will contact everyone and let them know.**

### **Membership**

The website has been updated with our current roster of paid members. If there are corrections, please drop an email to [maranews@w1mv.org](mailto:maranews@w1mv.org)

### **Presidents Notes**

MARA Facebook page: Our Massasoit Amateur Radio Association Facebook page with club events, meetings, photos, etc. are occasionally updated so that it may be another resource for us on which to spark interest in our club, amateur radio and keep members informed of what we are doing outside of our club meetings and in our community. If you go to the “about” tab on our page you can find our <http://www.w1mv.org/> web page for our present and past newsletters and other club information. Please send Phil N1XTB [n1xtb@powersrvcs.com](mailto:n1xtb@powersrvcs.com) or Wendy KC1GTR [kc1gtr.mara@gmail.com](mailto:kc1gtr.mara@gmail.com) any articles or photos you would like to see in our MARA newsletter, W1MV-MARA Website and Facebook page. Jeff - AJ1L has created a link to twitter to help get the word out even more!

### **Secretary's Notes – MARA Meeting 3/16/2021 – Wendy White-KC1GTR - Zoom Meeting**

**Open:** WA1BEE - Allen Hiltz called the meeting to order at 7:00pm

**Attendance:** Allen - WA1BEE, Phil N1XTB, Jeff AJ1L, Bob Maneville N1EBM, Tom Luckman - WA1TOM, David Stern KC1ABH, Barry N4NMF, Ray Ball KC1RAB, Loren Pimentel - N1IQI, Guest Mandy Martin – KC1OFM, Robert Macedo - KD1CY

**President** - Allen Hiltz - WA1BEE      **Vice President** – Jeff Lehmann – AJ1L  
**Secretary**– Wendy White – KC1GTR      **Treasurer** - Phil McNamara - N1XTB

**Secretary Notes - KC1GTR - Wendy White** – notes from Allen H – WA1BEE.

**Club Treasurer Report** – Phil gave the treasures report. Motion to accept Treasurer's report was made by Tom WA1TOM and the motion was seconded by Loren N1IQI. All in favor, 0 opposed.

**Repeater Report** –Jeff – All is good – nothing to discuss or vote on.



**Current Business** –Robert Macedo - KD1CY was our special guest speaker for our March meeting. He spoke for about an hour on Skywarn, R.A.C.E.S. and A.R.E.S. Future trainings that will be available from the organization. Presentation was sent to Phil and Allen. Links for the training will be shared when it is received.

Tom WA1TOM made a motion to close the meeting and Loren N1IQI seconded the motion. All in favor, 0 opposed. Allen closed the meeting at 7:57pm

### **HAM RADIO LOCAL AREA NETS**

Any additions or corrections contact John – N1UMJ at: [N1UMJ@arrrl.net](mailto:N1UMJ@arrrl.net).

All Frequencies are in MHz and 6 Meters (50.0 MHz and up.) are FM Mode unless otherwise noted.

#### **Sunday:**

8:30 AM WA1NPO – WARPSN Net, Whitman ARC Rptr, 147.225 +, PL 67.0 8:45

AM New England phone net, 3.945 +/- LSB

#### **Daily:**

7:00 PM NE Cracker Barrel Net, Matt – W1AEM, NCO, 3.921.00 MHz LSB Pilgrim Amateur Wireless Assoc. 10 Meter Net

7:00 PM 28.375.0 USB Cape & Island Traffic Net, Mon. Tue. Thur.

7:00 PM Plymouth N1ZIZ Rptr, 146.685 – PL 131.8

7:30 PM Falmouth N1YHS Rptr, 147.375 + PL 110.9 Genesis ARC CW Training Net

8:00 PM Eastern MA 2 Mtr Traffic Net, Boston W1BOS Rptr, 145.230 – PL 88.5

8:00 PM Norfolk County Radio Association Net, , Walpole Rptr, 146.895 – PL 123.0

#### **Monday:**

6:00 AM Cape and Islands Weather Net, M-S, Dennis K1PBO Rptr, 146.955 – PL 88.5

8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0

8:00 PM Norfolk County Emergency Preparedness Net, Walpole Rptr, 146.895 – PL 123.0

8:30 PM New England DMR net, DMR---MARC repeaters talk group 3181 New England Falmouth ARA Net, Falmouth K1RK Rptr, 146.655 – PL 88.5

9:00 PM Boston ARC Rag Chew Net, Boston W1BOS Rptr, 145.230 – PL 88.5

#### **Tuesday:**

7:30 PM Plymouth N1ZIZ Rptr, 146.685 – PL 131.8

8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0

8:00 PM Massasoit ARA Net, , Bridgewater W1MV Rptr, 147.180 + PL 67.0 (Except 3rd Tue!)  
Genesis ARC 2 Mtr Rag---Chew Net,

8:00 PM Norwood Amateur Radio Club Net, Norwood Rptr, 147.210 + PL 100.0 220 MHz  
Day! Try to find a 220 Repeater near you and give a call out!



### **Wednesday:**

7:00 PM Blackstone Valley ARC, 2 Mtr Simplex Net, 146.565  
8:00 PM Cape and Islands ARES Net, Dennis K1PBO Rptr, 146.955 – PL 88.5  
8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0  
8:00 PM Whitman ARC 10 Meter Rag---Chew Net, 28.333.0 USB - Except 1st Wed!  
9:00 PM Waltham Wranglers Swap Net., Waltham W1MHL Rptr , 146.64 – PL 136.5

### **Thursday:**

7:00 PM Genesis ARC CW Training Net, Plymouth N1ZIZ Rptr, 146.685 – PL 131.8 10 Mtr  
8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0  
8:00 PM General Class Rag---Chew Net, 29.470.0 FM  
8:30 PM Sturdy Mem. Hosp. ARC ARES Prac Net, K1SMH Rptr, 147.195+ PL 127.3 900 MHz

### **Friday:**

8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0  
8:00 PM Great Hill Swap Net, K1USN, 145.390 and Echollink/Irpl 9127

### **Saturday:**

8:00 PM South Shore Skywarn Net, Bridgewater W1MV Rptr, 147.180 + PL 67.0

\*VKEMCOMM\* Echolink Conference node: 270177/IRLP 9508 (due to \*WX---TALK\* Echolink conference node: 7203/IRLP 9219 outage) Refer to: <http://www.voipwx.net/>

### **Massasoit Amateur Radio Association Executive Board**

President - Allen Hiltz - WA1BEE  
Vice President Jeff Lehmann – AJ1L  
Secretary Wendy White – KC1GTR  
Treasurer: Phil McNamara N1XTB  
Call Sign Trustee: Phil McNamara N1XTB

<b>2M Repeater</b>	147.180+ (Tone 67.0)
<b>440 Repeater</b>	444.550+ (Tone 88.5)
<b>APRS Node</b>	Node 144.39 W1MV-1
<b>Packet BBS</b>	145.09 N1XTB-4
<b>Packet Node Brockton</b>	145.09 W1JOE-7 (BROCK)
<b>MARA Web Page</b>	<a href="http://www.w1mv.org/">http://www.w1mv.org/</a>
<b>Facebook</b>	<a href="https://www.facebook.com/w1mvmara/">https://www.facebook.com/w1mvmara/</a>
<b>Newsletter Editor</b>	<a href="mailto:kc1gtr.mara@gmail.com">kc1gtr.mara@gmail.com</a>
<b>ARC Web Page</b>	<a href="http://www.walnpo.org">http://www.walnpo.org</a>
<b>Qsl via</b>	<a href="http://www.eqsl.cc">www.eqsl.cc</a>
<b>Skywarn</b>	<a href="http://wx1box.org">http://wx1box.org</a> and <a href="http://www.powersrvcs.org/w1gmf/skywarn.htm">www.powersrvcs.org/w1gmf/skywarn.htm</a>
<b>Mailing Address</b>	P.O. Box 428 Bridgewater, MA 02324



**Monthly meetings** are held the 3<sup>rd</sup> Tuesday of each month, for time being, Tuesday Night Zoom meeting will at 7:00pm.

Our **Meetings-On-The-Air** are held all other Tuesday evenings at 8PM on 147.180+ and includes the Westlink News Report with the latest news about happenings in the world of Amateur Radio.

The **South Shore Skywarn Net** is held every Saturday evening at 8PM local time on 147.180+ and is open to all hams.

**VE Exams** are held the 2<sup>nd</sup> Saturday of every month, in Braintree contact Steve Cohen, W1OD via email [w1od@arrl.net](mailto:w1od@arrl.net). Walk-ins are no longer permitted. We will be hosting VE exams at 8:45 at the Watson building. If you know of anyone planning to take an exam, please have them drop a note to Steve to confirm a reservation.

<http://www.hamradiolicenseexam.com/index.html>

## The K7RA Solar Update

04/10/2021 (Courtesy of ARRL Newsletter)

Tad Cook, K7RA, Seattle, reports: Sunspots were only visible on 4 days of the current reporting week -- on April 3 - 6. As a result, the average daily sunspot number declined from 11.9 last week to 6.4. Average daily solar flux also dropped from 77.4 to 73.4, and the average daily planetary A index declined from 8.9 to 6.6.

Predicted solar flux for the next month is 74 on April 8; 72 on April 9 - 20; 74 on April 21 - 26; 73 on April 27 - May 1; 72 on May 2 - 5, and 70 on May 6 - 10.

Predicted planetary A index is 10, 8, 12, and 8 on April 8 - 11; 5 on April 12 - 15; 20, 18, 8, and 8 on April 16 - 19; 5 on April 20 - 21; 8 on April 22 - 24; 5 on April 25 - May 1; 8 on May 2 - 4, and 5 on May 5 - 12.

In April 1989, daily sunspot numbers ranged from 134 to 161.

Sunspot numbers for April 1 - 7 were 0, 0, 12, 11, 11, 11, and 0, with a mean of 6.4. 10.7-centimeter flux was 77.9, 72.1, 72.8, 70, 71.9, 73.6, and 75.7, with a mean of 73.4. Estimated planetary A indices were 8, 6, 4, 3, 5, 3, and 17, with a mean of 6.6. Middle latitude A index was 8, 4, 2, 2, 5, 3, and 15, with a mean of 5.6.



A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) K9LA's Propagation Page.





A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

Courtesy of Space Weather

4/11/2021

### Solar wind

speed: **334.4** km/sec

density: **6.4** protons/cm<sup>3</sup>

more data: [ACE](#), [DSCOVR](#)

Updated: Today at 1630 UT

### X-ray Solar Flares

6-hr max: **A3** 1450 UT Apr11

24-hr: **A5** 0932 UT Apr11

[explanation](#) | [more data](#)

Updated: Today at: 1635 UT

Daily Sun: 11 Apr 21

The sun is blank--no sunspots. Credit: SDO/HMI

### Sunspot number: 0

[What is the sunspot number?](#)

Updated 11 Apr 2021

### Spotless Days

Current Stretch: 4 days

2021 total: 40 days (40%)

2020 total: 208 days (57%)

2019 total: 281 days (77%)

2018 total: 221 days (61%)

2017 total: 104 days (28%)

2016 total: 32 days (9%)

2015 total: 0 days (0%)

2014 total: 1 day (<1%)

2013 total: 0 days (0%)

2012 total: 0 days (0%)

2011 total: 2 days (<1%)

2010 total: 51 days (14%)

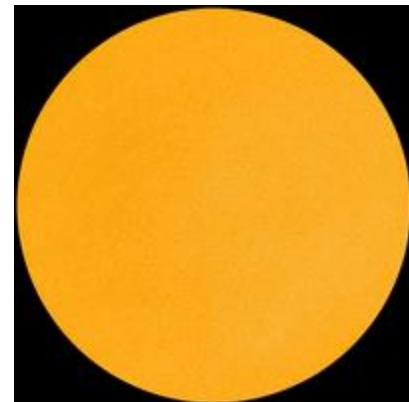
2009 total: 260 days (71%)

2008 total: 268 days (73%)

2007 total: 152 days (42%)

2006 total: 70 days (19%)

Updated 11 Apr 2021





## Thermosphere Climate Index

today:  $6.34 \times 10^{10}$  W **Cold**

Max:  $49.4 \times 10^{10}$  W **Hot** (10/1957)

Min:  $2.05 \times 10^{10}$  W **Cold** (02/2009)

[explanation](#) | **more data:** [gfx](#), [txt](#)

Updated 10 Apr 2021

## The Radio Sun

10.7 cm flux: **70** sfu

[explanation](#) | [more data](#)

Updated 11 Apr 2021

Cosmic Rays Solar Cycle 25 is beginning, and this is reflected in the number of cosmic rays entering Earth's atmosphere. Neutron counts from the University of Oulu's Sodankyla Geophysical Observatory show that cosmic rays reaching Earth are slowly declining--a result of the yin-yang relationship between the solar cycle and cosmic rays.

## Oulu Neutron Counts

Percentages of the Space Age average:

today: +9.6% **High**

48-hr change: -0.2%

Max: +11.7% **Very High** (12/2009)

Min: -32.1% **Very Low** (06/1991)

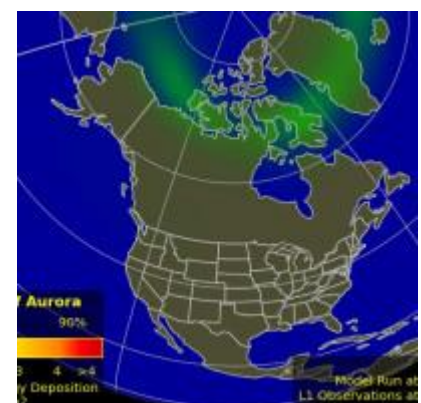
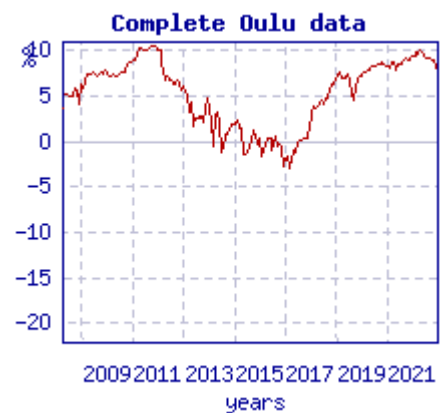
[explanation](#) | [more data](#)

Updated 11 Apr 2021 @ 0700 UT

Current Auroral Oval:

Switch to: [Europe](#), [USA](#), [New Zealand](#), [Antarctica](#)

Credit: NOAA/Ovation





### Planetary K-index

Now: **Kp= 1** quiet

24-hr max: **Kp= 2** quiet

[explanation](#) | [more data](#)

### Interplanetary Mag. Field

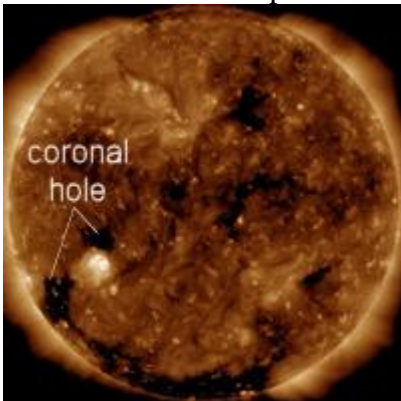
$B_{\text{total}}$ : **4.8** nT

$B_z$ : **-1.9** nT south

more data: [ACE](#), [DSCOVR](#)

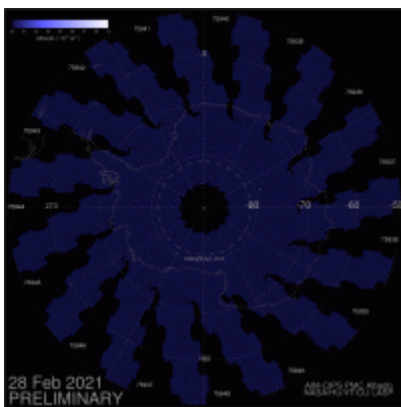
Updated: Today at 1630 UT

Coronal Holes: 11 Apr 21



Solar wind flowing from this southern coronal hole should reach Earth on April 16-17. Credit: SDO/AIA

Noctilucent Clouds Earth is currently without noctilucent clouds. The southern season ended in February and the northern season is not expected to begin until May.



Switch view: [Europe](#), [USA](#), [Asia](#), [Polar](#)



Updated at: 2021 Apr 10 2200 UTC

FLARE	0-24 hr	24-48 hr
CLASS M	01 %	01 %
CLASS X	01 %	01 %

#### Geomagnetic Storms:

Probabilities for significant disturbances in Earth's magnetic field are given for three activity levels: [active](#), [minor storm](#), [severe storm](#)

Updated at: 2021 Apr 10 2200 UTC

#### Mid-latitudes

	0-24 hr	24-48 hr
ACTIVE	25 %	10 %
MINOR	05 %	01 %
SEVERE	01 %	01 %

#### High latitudes

	0-24 hr	24-48 hr
ACTIVE	20 %	15 %
MINOR	30 %	20 %
SEVERE	25 %	20 %

Solar forecasts that are given in the Radio Society of Great Britain's weekly news bulletin from GB2RS can be found, <https://rsgb.org/main/gb2rs/>





## Upcoming New England QSO

The New England QSO Party on May 1st and 2nd is a great time to check out antenna systems and offers a moderately paced opportunity to work new states and countries. You will find a wide variety of participants, from newcomers to experienced contesters, all interested in making contacts with New England stations.

The goal is to get every one of the 67 counties in New England on the air so we hope that all of you will try to get on for a couple of hours. **Will you be QRV? Let us know with a message to [info@neqp.org](mailto:info@neqp.org)**

**The New England QSO Party is 20 hours long overall, in two sections with a civilized break for sleep on Saturday night. It runs from 4 pm Saturday until 1 am Sunday, then 9 am Sunday until 8 pm Sunday. Operate on CW, SSB and/or digital modes on 80-40-20-15-10 meters. For each QSO you will give your callsign, a signal report and your county/state. Top scorers can earn a plaque and everyone who sends in a log will get a certificate. The goal is to work stations anywhere in the world - and their goal is to work New England stations, so you'll be very popular!**

Last year we had logs from 283 New England stations and 896 more logs from around the country and the world.

The full rules are here -> <http://www.neqp.org/rules.html>

The 2020 results were posted last weekend -> <http://www.neqp.org/results.html>

**It's just under three weeks until the 2021 NEQP. Please make some QSOs even if you do not want to send in a log!**



## Courtesy of ARRL Newsletter

### 2021 World Amateur Radio Day is April 18



**What:** 2021 World Amateur Radio Day

**Who:** All amateur radio operators worldwide

**When:** Sunday, April 18, 2021 at 0000 UTC until Monday, April 19, 2021 at 0000 UTC

**Where:** A global event covering all regions of the International Amateur Radio Union (IARU)

**Why:** World Amateur Radio Day, held on April 18 each year, is celebrated worldwide by radio amateurs and their national associations which are organized as member-societies of the International Amateur Radio Union (IARU). It was on this day in 1925 that the IARU was formed in Paris. American Radio Relay League (ARRL) Co-Founder Hiram Percy Maxim was its first president.

Amateur radio experimenters were the first to discover that the short-wave spectrum could support long-distance radio signal propagation. In the rush to use these shorter wavelengths, amateur radio was “in grave danger of being pushed aside,” the IARU’s history has noted. Amateur Radio pioneers met in Paris in 1925 and created the IARU to promote the interests of amateur radio worldwide and to protect and enhance its spectrum privileges. Today, the IARU is a federation consisting of more than 160 national amateur radio organizations in as many countries and separate territories. The International Secretariat of the IARU is ARRL, the national association for amateur radio® in the United States.

On World Amateur Radio Day, all radio amateurs are invited to take to the airwaves to enjoy our global friendship with other amateurs, and to show our skills and capabilities to the public.

IARU has chosen “*Amateur Radio: Home but Never Alone*” as the theme for World Amateur Radio Day, Sunday, April 18, 2021. The theme acknowledges that during our physical distancing to reduce the spread of the COVID-19 virus, amateur radio stands out as welcome respite for its variety of activities and opportunities – even helping overcome online fatigue and social isolation. The amateur radio community has organized “wellness nets” to keep amateurs in touch and check on those who may be higher risk or elderly, “stay safe” special event stations across the globe and has encouraged generally higher levels of on air activity.



For its part, ARRL has accelerated new opportunities for its members to connect and learn through the ARRL [Learning Network](#) webinar series, and temporary rule changes to popular on-air events to encourage greater individual and at-home participation. Over the last year, many ARRL-affiliated radio clubs and in-person ham radio events moved their activities online. These efforts have all ensured that radio amateurs remain active and involved throughout our common pursuit of skill, service, and discovery in radio communications and radio technology.

**How:** World Amateur Radio Day is not a contest but rather an opportunity to “talk” about the value of amateur radio to the public and our fellow amateur colleagues. It is also a great opportunity to talk about your radio club and amateur radio in local media as a lead-up to ARRL Field Day (held each year during the fourth full weekend in June) and another ham radio related activity in your community – such as volunteers who serve in local emergency communication readiness including the ARRL Amateur Radio Emergency Service®.

**Here are just a few ways to participate in, and promote, World Amateur Radio Day:**

- Get a station on the air! Create your own personal “event” to talk about amateur radio to others, including family and friends.
- Find out more about World Amateur Radio Day by checking the IARU website and other Resources listed below.
- Create and hold a special net or on-air event on World Amateur Radio Day to raise the level of attention for the celebration, and to encourage other hams to talk about our hobby. Consider creating and offering a commemorative certificate for contacting your special activation. It can be an electronic one as these are cost effective.
- [ARRL Rookie Roundup](#) SSB is Sunday, April 18, 2021 from 1800 to 2359 UTC. The contest is aimed at hams licensed for three years or less. Use the opportunity to wish participants "Happy World Amateur Radio Day 2021" on the air.
- Get the word out! If you are an ARRL Public Information Coordinator, Public Information Officer, or responsible for radio club publicity, send a press release and conduct some public relations outreach to highlight the day and/or events. Use the IARU theme for 2021 to create a relevant, powerful, and contemporary message. Talk about all of the activities radio amateurs have continued to support during the pandemic, and how amateur radio serves our communities. Find recent examples of amateur radio in-the-news at [www.arrl.org/media-hits](http://www.arrl.org/media-hits).
- Promote your personal World Amateur Radio Day activity(ies) on social media platforms like Twitter and Facebook by using the hashtag **#WorldAmateurRadioDay**. Make sure you send it to various clubs, reflectors, and media.

Join us in celebrating World Amateur Radio Day and all the ways that amateur radio brings us together!



## Resources

ARRL, the national association for Amateur Radio

<http://www.arrl.org/world-amateur-radio-day> (this page)

IARU

<https://www.iaru.org/on-the-air/world-amateur-radio-day>

IARU Region 2: The Americas

<https://www.iaru-r2.org/en/on-the-air/world-amateur-radio-day/>

Article: “Why World Amateur Radio Day is key to highlight crucial service,” ITU News Magazine (No. 1, 2021)

<https://www.itu.int/en/myitu/Publications/2021/02/02/15/24/ITU-News-Magazine-No-1-2021>

## Public Relations and Outreach

[2021 World Amateur Radio Day backgrounder](#) (PDF)

[2021 World Amateur Radio Day media advisory](#) (WORD template)

[Día Mundial de la Radioafición 2021 transfondo](#) (PDF)

[Día Mundial de la Radioafición 2021 aviso a los medios](#) (WORD template)

Poster or flyer

[World Amateur Radio Day poster](#) (8-1/2 x 11 JPG)

[Día Mundial de la Radioafición poster](#) (8-1/2 x 11 JPG)

*Special thanks to ARRL member Anne Frank, KD9LRB of Deer Park, Wisconsin, featured in these posters!*

Super Antenna

**Frequencies:**  
3.5 MHz ~ 54 MHz.

+ plus 144 ~ 148 MHz  
simultaneously

**Meter Bands adjustable to:**  
80m - 75m - 60m  
40m - 30m - 20m  
17m - 15m - 12m  
11m - 10m - 6m  
+ *plus*  
**Simultaneous 2m**



**SUPER ANTENNA®**  
MP1DXMAX

HF

2 meters

**Simultaneously.**





March 14<sup>th</sup> the following 8 Satellite's were deployed for Amateur Radio. Coordinated by IARU Satellite Frequency Coordination Panel CubeSats being deployed are:

- GuaraniSat-1 (BIRDS-4)
- Maya-2 (BIRDS-4)
- Tsuru BIRDS-4)
- RSP-01
- WARP-01 • OPUSAT-II
- OPUSAT-II
- TAUSAT-1
- STARS-EC

BIRDS-4 satellites are carrying digipeaters and TAUSAT-1 has an FM transponder. Further information including the IARU coordinated frequencies are at <http://amsat.org.uk/iaru/>