

The Airscoop

K8PL



THANK YOU JEREMY

Thank you Jeremy Reese N8YP for your hard work publishing the Airscoop newsletter over the past years. Please feel free to submit an article from time to time.

Welcome New Officers

President Dave Palmgren N8DP



Vice President Paul Cavallario NJ9V

Secretary Maureen Potvin KD8SDE

Treasurer Jim Harsh N0OUR

Minutes of January DCARS Meeting

The Meeting was called to order at 7PM and the outgoing President and Treasurer, Walt, was Thanked heartily for his service to the Club. Jeremy N8YP was also thanked for his service. Our incoming Officers and those to remain were both welcomed and thanked.

Walt asked that his address be moved to Jim's, and that Jim be taken to the Credit Union to become responsible for duties to be resumed by our new Treasurer.

Walt gave the Treasurer's Report and it was motioned to accept by N8DP and Seconded by Bob.

The meeting was then turned over to N8DP. Dave stated we need to recruit younger club members as we are mostly older. We will waive membership dues for this year and concentrate on making our activities more fun oriented. Any Dues already paid by members will carry over for the future. Bob, N8UPR motioned to accept and seconded by Les, WA8LE. The motion carried.

FIELD DAY was discussed, which is always the 4th Saturday of June. Les and Bob will assist. Lowell noted he may not be at the event this year. The number of Stations to be active has not been determined. The public DEMO will take place on Aronson Island, once N8DP acquires permission via permit from the City. Walt has already seen to the Liability Insurance, \$200 usually. We always bring a dish to pass for the meal there. And, customarily, Jim M, W8KEW, brings donuts and chocolate milk for all! The weather is usually beautiful on the day!

Discussion took place regarding **HAMFEST**, but no location has been settled on as yet, so we cannot send out any details regarding invitations of hams. N8DP suggested we try to secure Bay College again...at the Heirman building. We need

space for the tables that hams need to display their goods and also Meeting Rooms too. This subject was tabled for now, pending forthcoming details.

Roger, KB8PLR, has a fender for the damaged one on the Ecom Trailer. The 2nd is back-ordered. We also have to replace one light. Walt mentioned that Maureen, KD8SDE obtained and donated a trickle charger for one of the generators. Roger also stated that there will be **NO POWERS RUN this year**, due to new gravel, **but the HARDWOOD RUN will take place TWICE. The first Hardwood race will be on June 17th. August 26th Felch is good with NEW GREAT ROADS!** It will be 100 miles when done! More cameras and radios are needed. **All communications will utilize Dickinson County Repeaters. 146.850, with 110.9 being the tone.**

NEW BUSINESS: Les had the idea to compose a letter that would invite our many Tech Hams to the 10 meter net in the Spring and Fall, as they have the privilege to be on that HF band...and the band is quite open during those seasons. Having time with the Techs that don't use it, yet might enjoy learning more about it could be a WIN for everybody. N8DP also said once a list of all Delta County Techs is compiled, he will invite them to our meetings, with the idea of getting them to get involved and enjoy operating and contributing their ideas to the club.

Members present were: K8WLT, N8DP, N0OUR, NJ9V, WA8LE, N8UPR, KB8PLR, K9VFS, KD8SDE.

Respectfully submitted by

Maureen, KD8SDE.

Treasurers Report

The Treasurer's report submitted to membership by Jim Harsh N0OUR.

Hams on the Ice



Towers...

Created by James 'Jimmie' R Hilit, II, N8NSN on 2021-05-30

"Editor's Note: Due to the popularity of some of eHam's older articles, many of which you may not have read, the eHam.net team has decided to rerun some of the best articles that we have received since eHam's inception. These articles will be reprinted to add to the quality of eHam's content and in a show of appreciation to the authors of these articles." This article was originally published on: 08/26/2008

Have you been considering placing a tower on your property for your antenna(s)?

There are a good number of things to be considered before a "good decision" can be made on what to raise into the air, and where to place it. The first question would be; what will be sufficient and more importantly safe, as an antenna support, to meet the needs for your system? Study the structural requirements for the antenna(s) going up (weight, wind load, turning radius etc.). Study the structural integrity of various support towers. Knowing the perimeters of your apparatus should always be the primary consideration. The investment of acquiring knowledge and the implementations of safety standards are paramount.

Many are intimidated by the "cost" involved in putting up a tower. The tower placement event does not necessarily need to be one that requires a great deal of money. There are means to have an economical tower. As well, there are ways to accomplish an economical tower installation safely. Again, it all hinges on what would SAFELY get the job done. Safety is the key word and is, ALWAYS, the most important consideration. You may not need 65G Rohn (my dream tower stock) to install a 2 element quad for 20 meters through 10 meters. Then again, in your particular situation that may be the required method to "keep the antenna in the air" SAFELY.

Perhaps you are a ham operator without the need for a very high tower. Maybe the system being thought of is not a multiple antenna array, which would increase wind load and tower twist factors encountered. You may find that a "lighter duty" tower will meet the many considered requirements. You may come to the conclusion that Rohn 25G will be sufficient for your needs. Maybe something even "lighter" than Rohn 25G is a possibility. Seeing the ever-increasing costs of new tower sections and hardware you may find yourself wanting to proceed with "used" tower.

Be very careful to study your facts on tower and not get burned on a deal. There is a "Light Duty" Rohn 20G still available from older installations of, primarily, TV antennas. The 20G Rohn and the 25G Rohn towers have differences that may not be known of or seen at an undereducated first observation. The horizontal lengths of "Z Bracing," (some call these "rungs"), on 20G is seven per section. The "rung" count on 25G is eight. Rohn refers to these as "bays". Thus, the bay count on 20G would be 6 as opposed to 7 "bays" on 25G. The gauge of galvanized steel used to make both tower grades, both in the wall thickness of the legs and the gauge of the "Z bracing", is different as well... 25G being the more substantial of the two. The structural support requirements (guy wires, bracing, "free stand" limits etc.) for the tower grades are different too.

These facts are not necessarily a "bad thing". In certain applications 20G is more than enough to be safe and secure. If you are looking for something for a "lighter duty requirement" set up... 20G may be just what you are looking for since so many see this as "disposable" tower.

The following is one hands on experience for the tower installation at my QTH. I wanted to offer this to "new comers" in the hobby or others that may be intimidated by HUGE DOLLAR AMOUNTS often encountered in a tower planting. There are economical and SAFE ways to "put some metal in the air."

Acquiring a tower...

There is a good chance that many homeowners, in your area, would like to have their old antenna support system removed from their property. This can usually be forecast when you see an old beat up TV antenna with the twin lead going nowhere and blowing in the breeze. Just knock on the door and ask. There are only a limited number of outcomes that could take place... "Get off my property before I call the cops", "I am going to put something up there on the 12th of never", "I still use it" or..." if you can take it down safely you can have it". I have acquired (2) Rohn 20G towers of about 40 feet each free for the removal efforts. Between the two towers I easily ended up with enough 20G to get 40 feet of tower in the air. The "extra sections" were given to friends who wanted to use them.

BEFORE YOU "CLIMB" ANY TOWER... INSPECT IT THOROUGHLY!!! I can't stress this point enough... The base section or any other given area may be rusted and weak. There is nothing like "riding down" a tower, from any height, strapped to it and nowhere to go if a section gives way and the tower comes down. The brace connection may come loose, as well with the potential to cause a dire situation. Just these two possible situations should never be considered to be rare events. Many

people (hams and non hams) have been badly injured, worse yet killed, in these types of situations. Safety First!

Show up to the "job" with the proper equipment... Gin pole/ropes, climbers' belt/tethers, and other relative tools and don't show up with out your hard hat and other relative safety equipment. Above all bring a competent ground man... When the tower is down be kind enough to cut off the legs as flush as possible. Go as far as to "beat them flush" to the concrete (assuming the foundation is above grade) to avoid the possibility of someone tripping over or falling onto the remaining leg remnants and being injured.

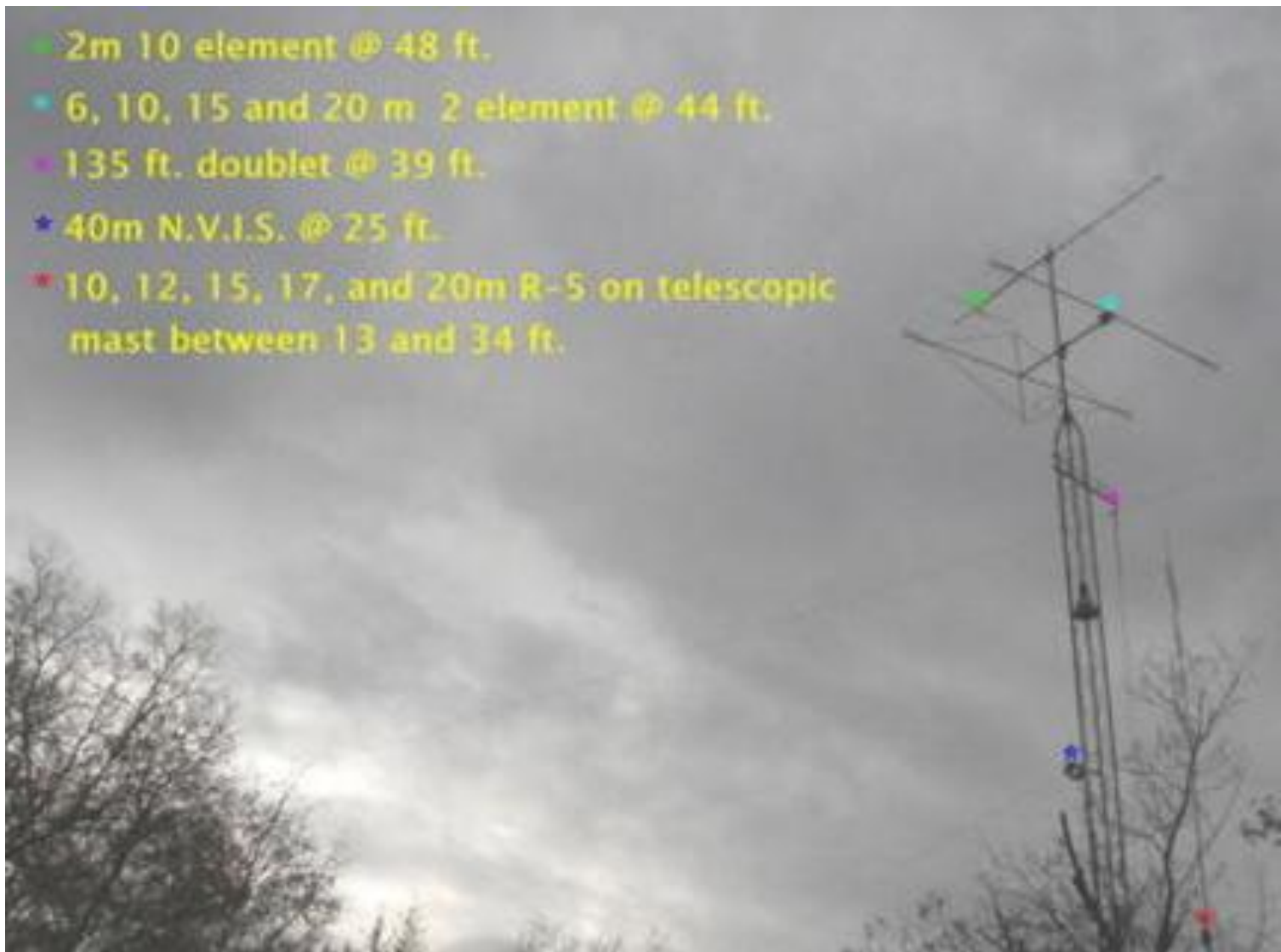
Installation example...

The 3X3 square and almost 4 foot deep hole was the biggest chore. A good 6-inch or so layer of "drainage" material was laid in for leg drainage. This is a must if you do not want the legs to split from water accumulation and freezing. On a "pour" over one yard; It is highly suggested to have re-bar reinforcement in the "hole". You may want to go ahead and ground all three legs to an eight-foot copper clad ground rod before the pour too. Go ahead and ground that re-bar as well... Preparation is your friend.

The concrete, trucked in for a mere 150 dollars, was 150 dollars well spent. That was in the summer of 2005. I am sure the costs have gone up some since then. There was a 1 & 1/2 yard minimum, thus enough concrete for a really nice looking foundation well above grade and yes, scribing your call sign in the concrete is a MUST DO. After researching the cost of purchasing "bagged concrete mix" at home improvement centers, hauling it home and risking the breakage of my trucks suspension (it takes a LOT of bags to make a yard and a half) and the time, effort and concrete structural integrity knowledge needed to "mix my own"... I found that you can save a few bucks by mixing the concrete by hand. The difference in cost is rather insignificant when you consider the quality of the "mix." The quality and strength of the "mix" or "slump" is important. Unless you are very familiar with concrete mixing and know how to get around a "4000 mix" or if you want "fiber mesh" etc. etc... Leave the mixing to the professionals. Your hauling vehicle will be grateful as well as your back.

The tower is "planted" nearly 4 feet away from the exterior of the home. The tower is also bracketed to the house, at about 12 feet, via home brew stand offs for the aluminum siding (no electrical connection between the house and tower), home brew braces made from 1&1/4 inch gas pipe and angular joints and mounting plate fittings. -- Very inexpensive and VERY effective bracing.

This installation is more than enough to support a Mini hybrid quad for 6, 10, 15 & 20 meters @ 44 feet and a 10 element 2 meter antenna @ 48 feet. There is also a home brew out-rigger, about 28 inches out from the tower, at 39 feet up. This is where there is a pulley/rope system for the 135-foot doublet installed. Notice the rotator is nestled comfortably at the intersection of the last intermediate and top sections.



Was this "enough"?

This tower has survived through quite a number of mid western, USA storms with straight line winds in excess of 70 MPH... BIG winds that up root trees of 2 or more feet in diameter wreck havoc on roofing shingles and blow metallic sheds blocks down the street! Also, there are no guy wires here being at only 40 feet (only the H.B. brackets at 12 feet).

No doubt, if there were to be larger antennas in the air here (such as a TH6DX or the like) or if going "up" any higher; I would have went with a much more costly tower such as Rohn 45G or the like. Even 25G would work for a larger antenna if properly installed and guyed. Even guyed I wouldn't trust the 20G with a larger antenna system due to the possibility of the tower "twisting" thus ... a catastrophe. Rohn 20G is exactly what it is... Light Duty.

Just wanted to say that even though 20G is not as "sturdy" as the 25G; it does have very high potential in the "right" situation. Best of all, if money is of consideration, a person can usually acquire and install a 20G tower quite economically. You have to consider the "needs and requirements" to meet the intended purpose. "Overkill" is very nice, however, many times it is just that...Overkill.

SAFETY FIRST! ALWAYS!

73 & GL on your projects,

Jimmie

(Article from eHam.net)

Calendar of Events

Feb 20, 2023 DCARS Meeting State Wide Real Estate 7:00pm

Feb 27 Project Group

March 4 Breakfast Meeting Family Inn 9:00am

March 6 Project Group

March 13 Project Group

March 20 DCARS Meeting

March 27 Project Group

April 1 Breakfast Meeting Family Inn 9:00am

News from Around the Upper Peninsula

Marquette HARS 10 meter Net

HARA 10-meter Net Some months ago, the club established a weekly get-together on 10 meters. The original intent was to give those Hams with a Technician-class license a chance to gain experience on HF SSB. Since that time, it has grown into a combination rag-chew, Health & Welfare and generally an old-fashioned good time! We continue to have a good showing of "regulars" and visitors! With the Cycle 25 (hopefully) increase in propagation, 10 meters appears to be hopping. 28.400 MHz is a calling frequency, so we have decided to move our net to 28.396 on Friday nights at 7:00 pm local time. Net control is usually Greg, KI8AF. Because it is a local net, you don't need to run much power or have a big antenna installation to be heard.

UP Ham Directory

It has been several years since a U.P. Directory has been published but it is now in the works to publish a new and updated directory. This is a small list of what will be in this 6 1/2" X 8 1/2 " spiral bound booklet: • A comprehensive listing of Hams in the U.P. • U.P. coordinated 2m and 70m repeaters and their parameters. • U.P. clubs. • VHF and HF nets as well as Michigan Section Traffic Nets. • A list of Silent Keys. Would you like a copy? Expected delivery date is May or June. They would be mailed to our club and from there they would be distributed. The cost is only \$5 if you pick them up at a club meeting or from Greg KI8AF. If you wish to have it mailed to you then the cost would be \$7. This is an incredibly reasonable deal! NO need to pay now, but I'm putting together a list of those wishing to purchase a copy. Contact me at (ki8af@arrl.net) by the end of March 2023 if you want a copy. After that it might be too late to order. If you want to pay now send a check to HARA for \$5 or \$7 and mark it for U.P. Directory or you can pay Greg directly if you bump into him.

(Articles taken from Hiawatha Amateur Radio Association of Marquette County)