The DX HUNTER

FEBRUARY 18

MDXA CLUB INFO

MEETINGS: 2nd SATURDAY OF EACH MONTH 7:30 AM @ GOLDEN CORRAL HWY 49 GULFPORT

MDXA WEBSITE: MDXA.org

Net Frequency: 147.375 Tuesday @ 8:00 PM

Editor E-mail: KE4MBP@GMAIL.COM

"More than a Club – We are Friends"

CLUB NEWS

It was decided by the Board that future Board Meetings will follow our normal Saturday meeting. We will try this and see how it works. As always all club members are invited to attend the meeting.

DUES ARE DUE - If you haven't paid your dues, please contact any Board Member. Thanks

NAQP: MDXA fielded two teams, a total of 6 members, to participate in the NAQP. Those participating and reporting had a total of over 621 QSO's. Good Job and Well Done.

Happy Valentines Day

ROTATOR INSTALATION AND HINTS:
As many of us have a tower(s) and beam antennas here are some rotator installation hints that I have learned over the years. By KE4MBP

TYPES OF INSTALLATIONS
There three general types of Rotator installations:

THE RECOMMENDED INSTALLATION is an "inside" tower mount with a top bushing or bearing to provide support and resist high wind loads. When the rotator is properly mounted this way, it can be rotated to turn an antenna or beam. The wind loading during storms, the rotational inertia of the beam and unbalanced weight are more important than the dead weight of the beam. It is important to minimize the height of the beam above the rotator to minimize the overturning force induced in a high wind.

An "outside" tower mount the rotator IS NOT as well protected but the installation is simpler. The wind load is deteriorated.

A telescoping or other-type mast can also be used. But the wind load is deteriorated.

UNBALANCED WEIGHT: Weight should be as closely balanced as possible. Unbalanced weight creates a bending moment of force which is concentrated on the mast at the point where it is clamped to the rotor.

This moment tends to strain the mast at that point and also to bind the ball bearings by creating excessive downward pressure on one side and upward pressure on the other. Such unbalance places additional stress on the motor and gear train. Unbalanced weight becomes critical as the distance from the antenna boom to the clamping point at the rotor is increased.

WIND PRESSURE against the boom and elements produces a bending force on the mast which can cause the same stresses as unbalanced weight. To strengthen the installation to withstand unbalanced weight and wind pressure the top mast should be as short and as strong as possible. In order to distribute the bending stress and prevent fracture of the mast, the rotator includes a specially designed steel clamping plate to clamp the mast to the rotator. After procuring the type of tower the next step is to wire the rotator to the control box and check out its operation prior to installation.

WIRING AND CHECK - OUT

A preliminary operation check should be made prior to Installation.

Decide the wire gauge (size) required and procure the number of feet of the proper cable. With the control unit and the rotator on the work table, connect the cable between the rotator and control unit using the full length of cable that will be used in the installation. IT IS IMPORTANT THAT #1 TERMINAL ON THE ROTATOR IS CONNECTED TO THE #1 TERMINAL ON THE CONTROL UNIT AND SO ON. NOTE: Some specifications call for HEAVIER gauge wire in LEADS #1 and #2. Wire the control to the rotator as specified.

With the rotator sitting in the upright position and connected to the control unit, by the eight (8) wire cable, plug the control unit power cord into a 120 VAC 50 60 Hz wall receptacle. Turn the power switch on, the meter should be illuminated.

Depress the "Brake Release' (if it has one) lever, then release it. An audible click should be heard in the rotator. This is the solenoid operating the brake wedge. Now depress the "Brake Release" lever, hold it and simultaneously depress the CCW direction switch. The rotator should turn CCW (looking from the top). Release the CCW direction switch and the rotator will coast down and stop. Now release the brake switch, the rotator is now locked into position.

Repeat the above for CW direction by depressing the brake switch first then the CW direction switch. CAUTION: It is best to release the direction switch just prior to the end of rotation (extreme CW or CCW position) in order not to cause undue stress on the stop arm and/or the gears. Now you can mount the rotator in the tower.

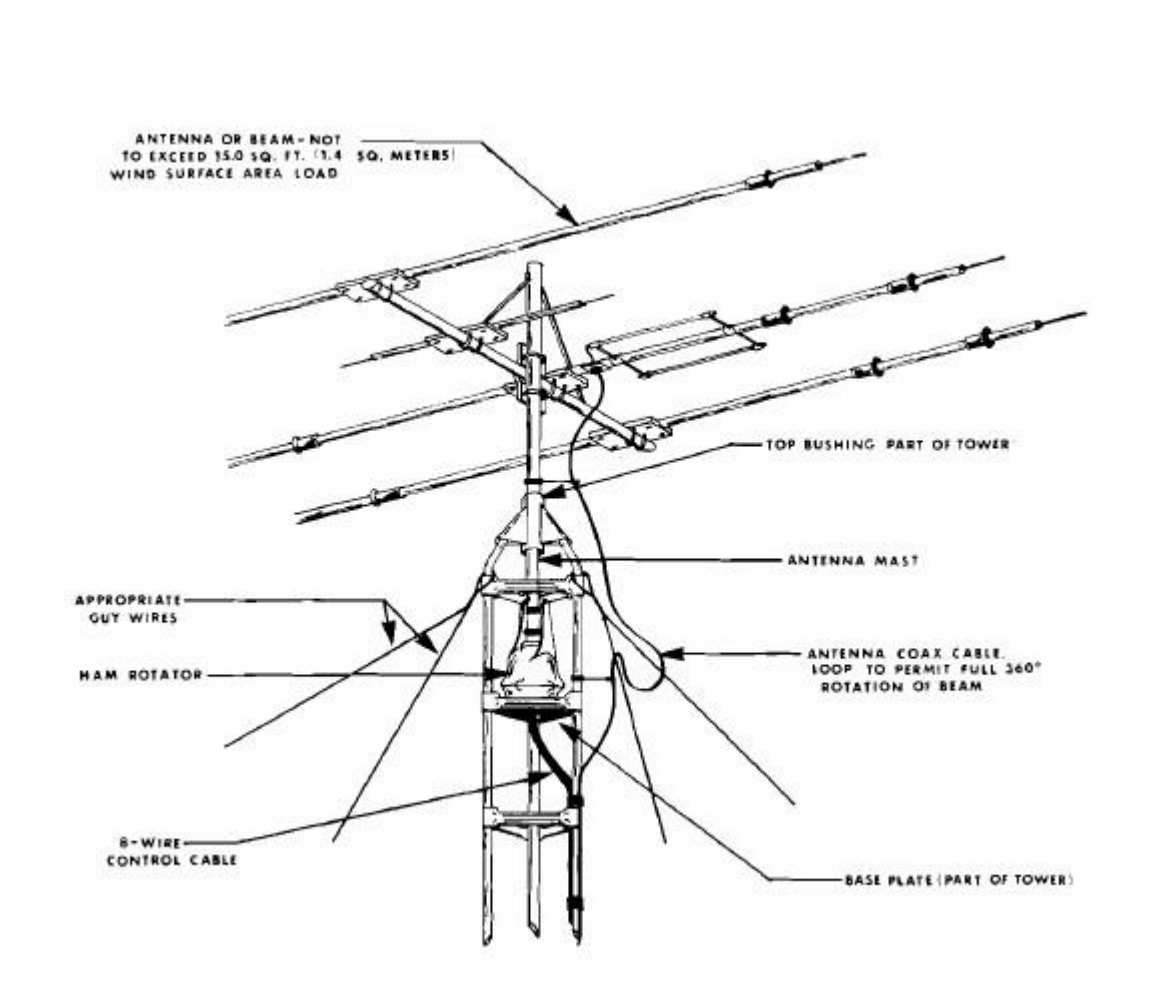
INSIDE TOWER:

The rotator is mounted inside a tower (see figure below) to the flat tower plate by means of four bolts.

1. Locate the rotator in the tower directly under the bushing.
2. Reattach the wires in the same manner as used in the trial assembly and secure the wires to the tower in such a manner that the wires will not be strained. (KE4MBP hint: Spray connections with clear lacquer)
3. The rotator is attached to the tower plate by means bolts and lock washers.
4. Tighten the bolts but not to final tightness. Observe how the rotator turns. It must rotate in such a manner as to turn the mast concentrically to the top bushing.
5. Trial assemble the mast to the top of the rotator using the U-bolts, nuts and lock washers through the rotator and clamp plate.
6. A high quality thrust bearing should used on the top of the tower
7. Tighten the four bolts carefully and insert a bolt with a locking nut into the tapped hole in the clamp plate to assure that the antenna mast does not turn in the upper mast support
8. The coaxial cable should be looped in such a manner that It will not foul when the beam turns around in a circle to the full 360 counterclockwise position

KE4MBP other hints:

1. If possible, mount the rotator and mast in the tower before you raise the final section. That way all work and alignments can be performed on the ground.
2. When finally setting the mast into the rotator, leave about 1/8" between the mast and the base of the rotator. This will allow the thrust bearing to carry all the weight of the mast and antenna. The rotator will now only be required to turn the mast/antenna system. There will be no load on the rotator other than twisting load. The rotator will last much longer and have little wear.
3. When using tape to secure coax & rotator cables to the tower, spray the tape with clear lacquer after you secure the cables.
4. At least yearly climb the tower and lubricate the thrust bearing to reduce the turning friction.
5. Cover the top of the thrust bearing with a small can or Tupperware bowl to act as a rain shield. This will help protect the bearing from rain/snow.



ANNOUNCED DX OPERATIONS

February					
2018 Feb01	2018 Feb05	Palau	T88XS	JL3WXS	By JL3WXS; HF
2018 Feb01	2018 Feb07	Papua New Guinea	P29VXG	LotW	By JA1XGI fm Rabual, New Britain I (IOTA OC-008, QI65dp); 160-30m; CW; focus on 160m for EU and NA; QSL also OK via JA1XGI
2018 Feb01	2018 Feb15	Panama	HP8	LotW	By W1USN as HP8/W1USN and AA1M as HP8/AA1M; HF; CW SSB + digital; QSL also OK via home_call (Buro or direct)
2018 Feb01	2018 Feb28	Senegal	6W	ON4AVT	By ON4AVT as 6W/ON4AVT; 20m; PSK SSB; 100w; Buddipole; holiday style operation; QSL also OK via Club Log
2018 Feb02	2018 Feb05	Ogasawara	JD1BNA	JL1UTS Direct	By JD1BNA fm Hahajima I (IOTA AS-031); focus on 160-10m; QSL: Nick Seki, 4-731-6 Sakuragi, Omiya-Ku, Saitama-C, Saitama, 330-0854, Japan
2018 Feb08	2018 Feb12	Belize	V31VP	WB0TEV	By WB0TEV; 80-10m; mainly SSB RTTY; QRV for CQ WW WPX RTTY contest w/ KK7JS; QSL OK via Buro or direct, also Club Log
2018 Feb08	2018 Feb14	Belize	V31JZ/p	NN7A	By NN7A fm South Water Caye (IOTA NA-180); 160-10m; mainly CW; QSL OK via ARRL Buro or direct, also via Club Log
2018 Feb09	2018 Feb16	Gambia	C5DX	LotW	By G4DJX M6LPJ M6POG M6MXD M6SQO; HF; CW SSB; 400w; multiband dipole; QSL also OK via G4DJX direct and Club Log
2018 Feb10	2018 Feb24	Bonaire	PJ4	LotW	By NE9U as PJ4/NE9U; QSL also OK via NE9U (direct w/ SASE or Buro)
2018 Feb13	2018 Feb20	Morocco	CN2	LotW	By DK1BT DL4WK DL7DF DL7UFR as CN2DF and CN2FR fm Tahazout; 160-10m; CW SSB RTTY PSK31; QSL also OK via DL7DF (DARC Buro or direct)
2018 Feb13	2018 Feb21	Palau	T8	Home Call	By AA4NC AA4VK as TBA; World War II Commemorative DXpedition
2018 Feb13	2018 Mar16	St Kitts & Nevis	V47JA	LotW	By W5JON fm Calypso Bay, St Kitts; 160-6m, incl 60m; SSB; yagi on 6m, verticals, dipole; QSL also OK via W5JON direct
2018 Feb18	2018 Feb28	Martinique	FM	LotW	By OH2IS as FM/OH2IS; focus on low bands; CW SSB, perhaps FT8; 1kw; vertical, dipoles; QSL also OK via OH2IS direct and Club Log

2018 Feb20	2018 Feb28	Benin	TY1TT	LotW	By ON6DX fm Grand Popo; 160-6m, mainly 160-30m; CW SSB RTTY; QSL also OK via ON6DX (Buro or direct) and Club Log
2018 Feb21	2018 Feb28	Mariana Is	KH0	Home Call	By AA4NC as KH0/AA4NC and AA4VK as KH0/AA4VK fm Saipan; World War II Commemorative DXpedition
2018 Feb23	2018 Mar16	Rotuma	3D2EU	DK2AMM	By 3D2AG DJ9RR DK2AMM DL6JGN PA3EWP; 160-10m; CW SSB + digital
2018 Feb26	2018 Mar06	Nicaragua	H7DX	WY1G	By WB2REM WY1G fm EK71au; SSB CW FT8; QSL also OK via Club Log

CONTESTING NEWS

FEBRUARY 2018

Vermont QSO Party	0000Z, Feb 3 to 2400Z, Feb 4
Minnesota QSO Party	1400Z-2400Z, Feb 3
+ CQ WW RTTY WPX Contest	0000Z, Feb 10 to 2359Z, Feb 11
CQC Winter QSO Party	0100Z-0259Z, Feb 12
ARRL School Club Roundup	1300Z, Feb 12 to 2359Z, Feb 16
+ ARRL Inter. DX Contest, CW	0000Z, Feb 17 to 2400Z, Feb 18
CQ 160-Meter Contest, SSB	2200Z, Feb 23 to 2200Z, Feb 25
South Carolina QSO Party	1500Z, Feb 24 to 0159Z, Feb 25
+ North American QSO Party, RTTY	1800Z, Feb 24 to 0559Z, Feb 25
North Carolina QSO Party	1500Z, Feb 25 to 0059Z, Feb 26

If you have info or articles you would like in the Newsletter, e-mail them to me and I will get them published.