N.E.W.S. LETTER
The Publication of the North East Weak Signal Group

SEPT 2004 VOLUME TWELVE ISSUE FOUR

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V P: Stan Laine, WA1ECF
Secretary: WIGHZ Paul Wade
Treasurer: K5GMX Bill Conner

CURRENT OFFICERS

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NEXT MEETING

SATURDAY THE 25TH OF SEPT
AT THE RADISSON HOTEL IN ENFIELD, CT
MIKE N1JEZ WILL SPEAK ON RECENT SATELLITE DEVELOPMENTS
THERE WILL BE A DUCT TAPE AUCTION

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PAGE 1
By the time you read this the 10 GHz cumulative will be over. Sorry that I couldn't get on this year. It looks like the wx was good for about half of each weekend. I hope to hear all the stories at the meeting.

Microwave Update is in Dallas in mid October this year. W1GHZ and I are going. Hopefully some others from our club will be able to make it too.

This September is the first regular September meeting in some time because in the past we had the conference in August and skipped September meeting. We have Mike N1JEZ speaking on recent satellite developments. Before that, let's have a duct-tape auction. If you're new to this, the idea is to get rid of something that is taking space in your shack (a boat anchor) by duct-taping it to something of value. The winner of the auction has to take both items.

We have newly elected officers and plenty to talk about. So, see you in Enfield on the 25th.

Tom, WA1MBA My position and Stan WA1ECF our VP's terms will be up this time next year because we can only serve a maximum of 2 years. I have found my service to be a valuable experience. Without new thoughts and new people running the show, our club will wither.... You are most certainly encouraged to nominate yourself if you choose to serve, so please speak up at the election meeting at the picnic.

**SECRETARY'S REPORT OF THE NEWS BOARD MEETING OF 17 JULY 2004.**

Since this was the special picnic meeting for the NEWS Group for 2004, there was no separate Board Meeting held.

**SECRETARY'S REPORT OF THE NEWS GROUP MEETING OF 17 JULY 2004.**

The activities for the day were started off about noon, with the annual picnic. Ron, WZ1V, was the chef for the occasion and he did his usual good job of cooking the burgers and hot dogs. Most of the food items were provided by the Club except for certain traditional items brought by individual members. It was all good as usual and there was more than enough for the 50 so members and guests who showed up. After everyone had enough to eat, the main event of the day started-various measurements on microwave rigs at 10, 24, and 47 GHz, brought in by NEWS Group members. There were a total of 24 rigs in all. Paul, W1GHZ, and Mark, K1MAP, set up the measurement range at the back of the K of C picnic grounds in Enfield, CT, so that everyone could set up their rigs under the shelter roof and be protected from any possible bad weather. As it turned out, our usual good luck held and we enjoyed a sunny afternoon.

The first test was a MDS evaluation, done by setting the test transmitter to a frequency in the 10 GHz band and after everyone found it, the test transmitter signal level was reduced until no one was able to copy it any longer. The test results showing the dropout level are as follows:

<table>
<thead>
<tr>
<th>Signal Level</th>
<th>Operator/Rig</th>
</tr>
</thead>
<tbody>
<tr>
<td>-60 dBm</td>
<td>Everyone Copies</td>
</tr>
<tr>
<td>-90 dBm</td>
<td>WW1Z</td>
</tr>
<tr>
<td>-92 dBm</td>
<td>W1GHZ</td>
</tr>
<tr>
<td>-96 dBm</td>
<td>W1AUV, KJ1K</td>
</tr>
<tr>
<td>-98 dBm</td>
<td>K2AEP</td>
</tr>
<tr>
<td>-100 dBm</td>
<td>AA1YN, N1LZK, K1AE, W1AIM, K10JF, W1FKF #2 (WA1MBA)</td>
</tr>
<tr>
<td>-101 dBm</td>
<td>NS1O</td>
</tr>
<tr>
<td>-102 dBm</td>
<td>K2CBA</td>
</tr>
<tr>
<td>-103 dBm</td>
<td>N1JEZ</td>
</tr>
<tr>
<td>-106 dBm</td>
<td>W1RIL, AF1T</td>
</tr>
<tr>
<td>-108 dBm</td>
<td>W1FKF</td>
</tr>
</tbody>
</table>

Next, the frequency was changed up to a maximum of 10 KHz and each operator had to search around the band until the signal was found. The test transmitter power level was raised until everyone was able to copy again.

<table>
<thead>
<tr>
<th>Signal Level</th>
<th>Operator/Rig</th>
</tr>
</thead>
<tbody>
<tr>
<td>-105 dBm</td>
<td>No one Copies</td>
</tr>
<tr>
<td>-98 dBm</td>
<td>W1FKF, AF1T</td>
</tr>
<tr>
<td>-97 dBm</td>
<td>W1RIL</td>
</tr>
<tr>
<td>-95 dBm</td>
<td>W1AIM, N1JEZ</td>
</tr>
<tr>
<td>-94 dBm</td>
<td>W1FKF #2 (WA1MBA)</td>
</tr>
<tr>
<td>-92 dBm</td>
<td>K2CBA</td>
</tr>
<tr>
<td>-91 dBm</td>
<td>NS1O, N1LZK</td>
</tr>
<tr>
<td>-90 dBm</td>
<td>W1AUV, K10JF, AA1YN, W1GHZ</td>
</tr>
<tr>
<td>-89 dBm</td>
<td>K2AEP</td>
</tr>
<tr>
<td>-88 dBm</td>
<td>W1MKY</td>
</tr>
<tr>
<td>-77 dBm</td>
<td>W1WZ</td>
</tr>
</tbody>
</table>

At this point in time, President Tom Williams, WA1MBA, called a temporary halt to the measurement activities and at 2:57 PM, called for the beginning of the formal part of the meeting. The first item on the agenda was election of officers for the coming year. It should be noted that major club officers are elected for two year periods unless someone is being elected to fill the remainder of a two year term of office held
by another club member. One Board of Directors spot is for one year and the other being contested is for two years. Bill, K5GMS, was nominated for the office of Treasurer presently held by Fred, N1DPM. There were no other nominees so Bill was elected unanimously. Next, the office of Secretary, presently held by George, N1GJ, was contested. There were no nominees for this office, but Paul, W1GHZ volunteered. He was elected unanimously. The two year Board of Director slot, presently held by Stan, KA1ZE, was next on the election agenda. There were no nominees but Don, W1FKF, volunteered and was elected unanimously. The final spot on the election agenda was the one year Board of Directors slot presently held by Mark, K1MAP. No one volunteered so Mark agreed to remain in office for another year. He was unanimously voted into office.

Jeff, N1KBY, donated several dishes to the club that were later auctioned off. The auction proceeds of $50 were donated to the club treasury.

Bruce, N2LIV, the NEVHF Conference chair gave a short report on the 2004 Conference held in April. Dates for the 2005 and 2006 Conferences are on the club web page. We will continue to hold them in April. It was generally agreed that April was better than the fall dates used in previous years. Bruce said that he put considerable thought into avoiding as many conflicts as possible. He is looking for speakers—think about what you might contribute to a future conference. Also, he is looking for your inputs on whether to change the conference proceedings to a CDROM format.

Tom, WA1MBA, announced dates for the final two meetings of 2004-25 September and 13 November. These dates do not conflict with any big meetings or contests as far as Tom knew.

At this point, (3:06 PM) the formal part of the meeting was adjourned and activities returned to further microwave rig measurements.

The final set of 10 GHz measurements covered relative transmit power level. One rig was selected as the standard and the transmitted power level as received at the test site of all of the other rigs was measured in dB relative to the standard.

<table>
<thead>
<tr>
<th>Operator/Rig</th>
<th>Power Level</th>
<th>Rig Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1FKF</td>
<td>-11dB</td>
<td>.75W/18&quot;DDS</td>
</tr>
<tr>
<td>WW1Z</td>
<td>-?</td>
<td>.005W/18&quot;Offset</td>
</tr>
<tr>
<td>W1AIM</td>
<td>-?</td>
<td>5W/24&quot;Offset</td>
</tr>
<tr>
<td>K2AEP</td>
<td>-20dB</td>
<td>.11W/18&quot;DDS</td>
</tr>
<tr>
<td>W1GHZ</td>
<td>-13dB</td>
<td>2W/18&quot;DDS</td>
</tr>
<tr>
<td>K2CBA</td>
<td>-?</td>
<td>?.36&quot;x40&quot;Offset</td>
</tr>
</tbody>
</table>

This concluded the 10 GHz measurements. Next, the 24 GHz rigs were set up and prepared for MDS testing. The results were as follows:

<table>
<thead>
<tr>
<th>Signal Level</th>
<th>Operator/Rig</th>
</tr>
</thead>
<tbody>
<tr>
<td>-50dBm</td>
<td>All Copy</td>
</tr>
<tr>
<td>-94dBm</td>
<td>W1FKF, W1GHZ, KA1OJ</td>
</tr>
<tr>
<td>-102dBm</td>
<td>N1JEZ</td>
</tr>
</tbody>
</table>

The final set of measurements for the day were transmit power output level measurements at 24GHz, again using one station as the standard.

The results were as follows:

<table>
<thead>
<tr>
<th>Operator/Rig</th>
<th>Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1JEZ</td>
<td>0dB (Standard)</td>
</tr>
<tr>
<td>W1FKF</td>
<td>-3dB</td>
</tr>
<tr>
<td>W1GHZ</td>
<td>-4dB</td>
</tr>
<tr>
<td>KA1OJ</td>
<td>-7dB</td>
</tr>
</tbody>
</table>

The meeting concluded with random testing between several of the operators who brought and set up 47GHz rigs. Mentoring should be a part of the overall effort. Art suggested that an ADHOC committee flesh out the program. He made a motion that was seconded, that a committee of NEWS members be formed to pursue this idea. Motion passed. The committee will be composed of the following volunteers-K1UHF, WA1ECF, W1RZF, AA1YN and W1TDS.

A duct-tape auction was held. There was the usual collection of "good stuff" that Tom, WA1MBA, found ready buyers for. Everyone had a good time and passed along most of the usual comments.

Tom, WA1MBA, called for a break from 2:00 to 2:30 PM to be followed by the main talk of the day by Tom Frenaye, K1KI, ARRL New England Division Director. Tom spoke on the history behind and reasons for the changes recently proposed by the ARRL for their VHF, UHF and Microwave contests. The second half of his program consisted of a very lively question and answer period. The session lasted for over one and a half hours.

The meeting was adjourned at 4:11 PM.
FOR SALE OR SWAP:

1- 6 ft. Foot Perforated steel RADAR Dish. (1/2” perfs.) Minor ding on rim, some rust. No feed or mount. Pickup only in South Eastern MA at my CBA. $25 OBO.

Bob, K1VU Ex:WA1OFR k1vu@tmlp.com

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