

To: LRRR Membership
From: LRRR Technical Committee
W1UR (Chairman),AA1NZ,W1JY,N1MAZ,N1HQF & N1XBD

(Annual Meeting 20 Sept 1997)

Subject: Technical Committee Annual Meeting Report (Sept.1996 to Sept.1997)

The Committee has been fairly active since the last Annual Meeting: namely, we have relocated the repeater from Long Island to Bennett Hill in Ossipee on 16 May 1997. The reason for the location change was to enhance repeater coverage in a) areas around the Lake that were spotty for mobiles and b) increase the overall range. The motive for increasing range was to attract more usage of the repeater and gain new members to replenish an ever shrinking membership. First, it was thought that if we could increase the transmitter power at the Long Island site, we would be able to make the named improvements. On 19 April 1997 the Committee borrowed W1JY's 100 watt amplifier and put it in-line, whereby raising the power out of the duplexers from 9 watts to 50 watts. This showed a marked improvement to the few stations we contacted, but had one very negative result in that it destroyed Dick's (W1NBL's) TV reception on channel 9. The amplifier was removed. Basically we were stuck with what we had at Long Island with no chance of improvement. The repeater worked very reliably under Dick's care for years, which caused the Committee to dig deep into thought as to what to do. Coincidentally, the 31, so-called Ossipee machine had been recently sold and removed from that site. This Bennett Hill site of Frank's (N1DQB) had showed great coverage around the Lake and further in it's 4 or so years of operation. Frank offered the site position to the LRRR for the 03 machine. We did testing first on packet using a Gam vertical whip mounted in the same place on Frank's tower as his antenna had been. Further testing on FM 147.030 and other frequencies was carried out, with encouraging results.

The Committee decided to work toward moving the repeater soon. A used, closed 19 inch cabinet was purchased at the Spring Rochester Hosstraders to house the repeater, back-up battery, amplifier, etc. The cabinet (\$15 donated) has a back hinged door and a hinged top access, perfect for our use. We purchased a new 2mtr/440mhz Diamond 501xna vertical antenna (\$200), which was identical to what Frank had used with great success on his 31 machine. We would be able to use the same tower mounting bracket and hardline coax which was still in place on the tower. The dual band capability was important to us for future linking and control purposes. A new trustee, W1UR, was appointed and a new ID chip (\$40 donated) was purchased from Kendercom which would temporarily set the repeater ID call as W1UR/R. Dick did not wish to remain trustee or allow his call to be used if the repeater was moved out of his care, which the committee understood. On May 16th the repeater was moved to the new location and put into operation. Johnny allowed us the use of his amplifier/power supply until such time as we had obtained our own. The committee wanted to prove the site (relative to frequency usage by other repeaters, interference, intermod, etc) before requesting funds for our own amplifier. We did have repeater problems to solve which were probably latent in nature and brought into play by movement of the unit and aggravated by higher than normal

— CLUB CALL KB1CDY —

temperatures. The repeater resides with 6 other repeaters in a secure radio shack at Bennett Hill.) Eventually the Committee was able to locate and correct the intermittent conditions and bring it back to its previous stable state. Since the machine was working well, the matching 100 watt amplifier (\$549) was purchased from Kendercom and installed in June. This Model PA100 continuous amplifier is specific for the application and is working perfectly.

The overall operation and coverage of the repeater has shown good improvement in most all directions. Communications have been carried on as far North as Berlin, South to Newington, Concord, East to Sebago Lake and West to Route 93. The Laconia area was improved over what it was, but still not flawless. The Committee is looking to schemes of using another receiver and cross banding on 440 back to the repeater to further improve the Laconia coverage even though there has been improvement.

Other related issues:

We filed and received a Club Call as **KB1CDY** in order to eventually apply for a Club Vanity call.

Coordination of our repeater at the present location has been sought after. But, even tho the coordinator WA1YEG, Bob Skinner, of NESMC (New England Spectrum Management Council) was co-operative to talk with, we can't seem to get any paperwork out of him! It basically comes down to "are we interfering with any other repeater operation, or visa versa?". We have had no such trouble to date. Occasionally, depending on your location, you may hear either WA1DKL (near Keene) or W1TKZ (Wellesley, Ma). The DKL repeater uses a 100 Hz tone for access. These stations are 75 or more miles away from the Ossipee site.

Our machine is using 300 watts of ac line power when transmitting. We have installed a transmit Running Time Meter for recording KTUs (Kilowatt Time Units). The reading on 23 Aug 1997 was 45 KTUs (45 hours) since 26 July 1997. The repeater is transmitting on the average of 1.7 hours per day. This would translate to approximately 1/2 kwhr per day or 15 kwhr per month.

Location at 43°41.877' N lat and 71°09.242' W long. 1300 feet ASL

If any of the membership would like to view the repeater site, we would happy to give you a tour.

The back-up emergency battery was brought up to full charge 23 August 1997.

Respectfully Submitted,
Chairman, TECOM
Dan Morgan, W1UR

New Trustee:

Dick has asked to have his call removed from the repeater and also as Trustee.

The President has appointed Dan Morgan, W1UR, as Trustee. The new call sign for the club, K1CDY, has been issued. W1BST (Doc Steady's call) will be applied for as a memorial call sign.

Packet station/packet code:

Should we use old antenna for packet? The concensus was "yes".

ARES net:

A letter was received from Cliff Dickinson, President of CNHARC requesting permission to use the .03 repeater for an ARES net. With the removal of the ,31 repeater there is no longer an ARES program in lower Carroll County. Coverage of the .03 repeater is good.

Moved and seconded to allow CNHARC to use the repeater for approximately one hour one day a month for an ARES net. Motion carried.

Second signer for checks:

Requested that the Financial Committee designate a second signer for checks in emergencies. Moved and seconded that the President be thre signer in such circumstances

The meeting was adjourned at 1:22.

Respectfully submitted,

Emily P. Hanson, N1JLP
Secretary

RCD

25 OCT 97

MINUTES OF 1997 ANNUAL MEETING

SEPTEMBER 20, 1997

President Tom Bates, AA1NZ, called the meeting to order at 1: p.m. with 20 association members and 12 guests present.

COMMITTEE REPORTS:

Financial Committee:

Reading from the latest Treasurer's report Tom reported that there was a balance of \$1,772.49 with no outstanding bills.

Executive Committee:

An Executive Committee meeting was held on August 9, 1997 for the purpose of finalizing the plans for the September Annual Meeting.

Technical Committee:

A complete copy of the Technical Committee Report as presented by Dan Morgan is appended.

MEMORIAL:

A moment of silence was observed as a memorial to members and spouses who had passed away during the past year. Those so remembered were Robert Hanscom, WIISK, and Carol Kidler, wife of WIDOK.

NEW BUSINESS:

The President read a letter of resignation as Secretary from Dick Patten, WINBL. On motion duly seconded it was voted to regretfully accept this resignation.

The President announced that Emily Hanscom has agreed to serve as Secretary for the remainder of Dick's term.