

The LANDLINE

The Newsletter of the
 COPPER COUNTRY RADIO AMATEUR ASSOCIATION, INC.
 P.O. BOX 217 - DOLLAR BAY, MICHIGAN 49922-0217
 Visit us on the World Wide Web: www.ccr_aa.net

DECEMBER MEETING:

The December meeting (Christmas party) will be held on Tuesday, December 6, 2005 at the Dollar Bay Fire Hall in Dollar Bay at 7:00pm Members should bring a dish to pass, Hot or Cold, and liquid refreshments will be provided by the club. There will be a very short business meeting and the remainder of the time will be spent at the Christmas party. If you wish to bring a guest, by all means bring them along. These parties have proved to be successful in past years.

V.E. TEAM REPORT -2005

Each year at this time, the CCRAA/HARC V.E. Team files a report to the Volunteer Examiners who worked so faithfully all year. We would like the CCRAA and HARC membership to share with us, our accomplishments for 2005. Here's what we did:

We gave 30 elements

	P	F
Element#1	0	1
Element#2	12	8
Element#3	1	7
Element#4	0	1
Totals:	13	17

Out of all of this we have the following new or upgrades to report:

Technician: 12
 General: 0
 Extra: 0
 Element Credit: 1
 Morse code Credit: 0

We lost a couple of members due to college graduation (Billy Brookins) and Retirement (?) of Roland Burgan. We are short three members now, on our V.E. Team, so if you have a General Class license or higher, are at least 18 years of age, and never have had your ham license revoked you could be a Volunteer Examiner. See George, W8FWG, for an application. You would have to serve only two hours, just ONCE A YEAR, so that isn't too much to ask, now, is it? Thanks for considering a position with the CCRAA/HARC Team!

V.E. EXAM SCHEDULE FOR 2006 **V 1.0**
UPPER PENINSULA OF MICHIGAN

ORGANIZATION NAME : COPPER COUNTRY RADIO AMATEUR ASSOCIATION, INC.
 (CCRAA) & HUSKY AMATEUR RADIO CLUB (HARC)
 V.E.C. : ARRL
 DATES OF EXAMS : JAN 21.....APR 08.....JUL 08.....OCT 14
 WEEKS OF EXAMS : SECOND SATURDAY OF: APR.....JUL.....OCT (Exception:
 January.....it's the third Saturday)
 COUNTY : HOUGHTON
 LOCATION OF EXAM : MICHIGAN TECHNOLOGICAL UNIVERSITY
 ADDRESS OF EXAM : WADSWORTH RESIDENCE HALL (EAST END OF CAMPUS)
 [SOUTH SIDE OF HWY U.S. 41]
 CITY, STATE, ZIP : HOUGHTON, MI 49931
 ROOM NUMBER : G04W. (Basement) go downstairs, follow hallway to Room G04W
 (opposite Campus Radio Station WMTU)
 TIME OF EXAM : 9:00 AM EASTERN
 YOUR ARRIVAL TIME : 8:30 AM EASTERN
 PRE-REGISTRATION? : NOT REQUIRED
 CONTACT PERSON : GEO. R. THURNER, W8FWG E-MAIL: w8fwg@arrl.net
 ADDRESS : 225 KEARSARGE STREET
 CITY, STATE, ZIP : LAURIUM, MI 49913
 TEL NUMBER : (906) 337-2542 Mobile phone: (906) 369-2542

ORGANIZATION NAME : W5YI
 V.E.C. : W5YI/VEC
 DATES OF EXAMS : FEB 04.....MAY 06.....AUG 05.....NOV 04
 WEEK OF EXAMS : FIRST SATURDAY OF: FEB.....MAY.....AUG.....NOV
 COUNTY : DICKINSON
 LOCATION OF EXAMS : DICKINSON COUNTY LIBRARY
 ADDRESS OF EXAM : 401 SOUTH IRON MOUNTAIN STREET
 ROOM NUMBER : CONFERENCE ROOM
 CITY, STATE, ZIP : IRON MOUNTAIN, MI 49801
 TIME OF EXAM : 9:30 AM CENTRAL
 YOUR ARRIVAL TIME : 9:00 AM CENTRAL
 PRE-REGISTRATION? : NOT REQUIRED
 CONTACT PERSON : MARK J. LEWIS, N8UKD E-Mail : (None at his time)
 ADDRESS : 412 FAIRMONT STREET
 CITY, STATE, ZIP : KINGSFORD, MI 49802
 TEL NUMBER : (906) 774-6598

ORGANIZATION NAME : HIAWATHA AMATEUR RADIO ASSOCIATION (HARA)
 V.E.C. : ARRL
 DATES OF EXAMS : Mar 11.....Jun 10.....Sep 09.....Dec 09
 WEEK OF EXAMS : Second Saturday of Mar.....Jun.....Sep.....Dec
 COUNTY : MARQUETTE
 LOCATION OF EXAM : New Club Hq. Health Dept. across the street from M.S.P. Post
 ADDRESS OF EXAM : Mgt. Co. Health Dept. U.S. 41 , Negaunee
 ROOM NUMBER : Downstairs - Entrance at back of building)
 CITY, STATE, ZIP : Negaunee, MI 49866
 TIME OF EXAM : 8:30 AM EASTERN
 YOUR ARRIVAL TIME : 8:00 AM EASTERN
 PRE-REGISTRATION : NOT REQUIRED
 CONTACT PERSON : RICHARD, E.B. SCHWENKE, N8GBA E-Mail: N8GBA@chartermi.net
 ADDRESS : 21 SMITH LANE
 CITY, STATE, ZIP : MARQUETTE, MI 49855
 TEL. NUMBER : (906) 249-3837

ORGANIZATION NAME : IRON RANGE AMATEUR RADIO ASSOCIATION (IRARC)
 V.E.C. : W5YI/VEC
 DATES OF EXAMS : THIRD THURSDAY OF EACH MONTH
 WEEK OF EXAMS : ONCE PER MONTH, BEFORE THE CLUB MEETING
 COUNTY : IRON
 LOCATION OF EXAM : IRON RIVER LUTHERAN CHURCH (ELCA)
 ADDRESS OF EXAM : ACROSS FROM MC DONALD'S
 ROOM NUMBER : -
 CITY, STATE, ZIP : IRON RIVER, MI 49935
 TIME OF EXAM : 6:30 PM CENTRAL TIME
 YOUR ARRIVAL TIME : 6:30 PM CENTRAL TIME
 PRE-REGISTRATION : REQUIRED- IF NO APPLICANTS- NO EXAMS WILL BE HELD
 CONTACT PERSON : DAN WATERS, AA9JG E-MAIL: dmwaters@ironriver.tv
 ADDRESS : 3338 E. U.S. 2
 CITY, STATE, ZIP : IRON RIVER, MI 49935
 TEL. NUMBER : (906) 265-4240

ORGANIZATION NAME : DELA COUNTY AMATEUR RADIO SOCIETY (DCARS).
V.E.C. : ARRL
DATES OF EXAMS : JAN 14.....APR 08.....JUL 08.....OCT 14
WEEKS OF EXAMS : SECOND SATURDAY OF: JAN.....APR.....JUL.....OCT
COUNTY : DELTA
LOCATION OF EXAM : BAY de NOC COMMUNITY COLLEGE
ADDRESS OF EXAM : US41/M35 AT DANFORTH RD
CITY, STATE, ZIP : ESCANABA, MI 49829
ROOM NUMBER : VARIES WITH EACH QUARTER
TIME OF EXAM : 9:30 AM EASTERN
YOUR ARRIVAL TIME : 9:00 AM EASTERN
PRE-REGISTRATION? : NOT REQUIRED
CONTACT PERSON : LES ELDER, WA8LE E-MAIL: wa8le@uplogon.com
ADDRESS : 6985 G75 LN
CITY, STATE, ZIP : ESCANABA, MI 49829
TEL NUMBER : (906) 789-1543

CCRAA WEB PAGE:

The club maintains a web page at: www.ccraa.net We encourage all of our members (and other ham friends) to look in on this page. There is a lot of information here, with club officers listed, members, links to other sites, swap-n-shop items, etc. Put that URL into your computer and look in on us often. You'll find the latest meeting dates, plus the schedule of ham exams throughout the U.P. too. The web page is maintained by George (W8FWG) and by Mike (AA9VI).

FREE PDF CONVERTER:

I found a free converter that works great. It is located at <http://www.cutepdf.com/Products/CutePDF/writer.asp>

(Source: Mike Swiatkowski, AA9VI, Webmaster of the CCRAA Web Page)

Winter Preparation:

Cold weather is bringing lots of folks back indoors, and that means it's time to start our ham radio activities. Whether it is operating from the home station, running a mobile station, packing and operating portable while traveling, or building and maintaining equipment, there is one thing that all of these activities have in common: the need to maintain safety! Here are my "10 commandments of ham radio safety". See if you follow all or them, or if you have learned by experience the hard way that you should!

1. Always do antenna and tower work with a "spotter", a helper who can assist if you get into trouble, or who can call for assistance and render aid in an emergency.
2. Disconnect all equipment from the power mains before you begin working on it. Always disconnect the power before connecting or disconnecting coaxial cables, as these may be grounded and thus provide a return path from the equipment through your body when you touch the equipment and either shield of the coaxial cable.
3. Ground your equipment according to the manufacturer's recommendations.
4. Always use the correct size circuit breaker or fuse.
5. Pay attention to the instructions when installing new equipment. There is almost always a safety page in the equipment manual.

6. Review and configure your station and antennas to comply with the FCC radio frequency safety rules. This means taking responsibility for knowing about the RF field generated by your equipment and how to make sure that people in the vicinity of your station do not receive excessive exposure to radio frequency energy.

7. Plan and install your station so that antenna feedlines, accessory cables, and power cables are dressed neatly out of the way to avoid people tripping over them and so that all cables can be easily identified when repairs need to be made.

8. Keep instruction manuals and other reference books related to your station where you can find them easily. This will help you avoid the temptation to hook up equipment or make changes to the station without checking the instruction manuals.

9. If you build or repair your own equipment, do so in a neat and well organized shop. Working in a messy environment is a prescription for disaster! Never eat or drink while working on equipment. Be sure that your work area is well ventilated if you are using aerosol sprays or soldering.

10. Ask for help when you need it! Although it may be tempting to get the project finished right away, doing it wrong and having to do it over again will waste a lot of time, and injuring yourself because you didn't have a helper to lift a heavy weight or to help you hang an antenna is just plain silly.

Submitted by: Patrick Tice, WA0TDA

"Handi-Hams" - The COurage Center

Golden Valley, MN

MOVED OR MOVING?

Perhaps you are a "snowbird" (Gone south for the winter!).....or maybe you've made a permanent move? We'd like you to continue receiving the CCRAA's "Landline" and if you'd like to continue receiving it, please give us your new E-Mail or USPS address. And, of course if you are returning in the Spring, give us another update at that time. We'd like to keep in touch with you. Please write or call the Editor: Howard (KD8ABP), listed at the end of this newsletter.....you'll be glad you did!

CCRAA 2006 meeting Dates - the first Tuesday of the Month:

Jan 3rd, Feb 7th, Mar 7th, Apr 4th, May 2th, June 6th, **July 4th**, Aug 1st, Sep 5th, Oct 3rd, **Nov 7th**, Dec 5th.

Note: dates in Red To Be Changed.

NEW TEL. LINE FOR WXK73

In case you haven't recognized those call letters they belong to NOAA Weather Radio in the Copper Country, and after a three-month wait, the telephone company has finally installed a new line to the NOAA facility at Painesdale. Listen in on 162.400 MHz. You will now hear some beautifully clear audio, free of hum and crosstalk. Thanks to all of the listeners who called in these reports, and thanks to Robin Turner, Meteorologist-In-Charge at the Negaunee National Weather Service Office.

Skywarn Recognition Day

The 7th annual SKYWARN Recognition Day special event will take place on December 3rd, 2005.

SKYWARN Recognition Day is an event co-sponsored by the National Weather Service and the ARRL.

It's NWS's way of saying thank you to amateur radio operators for their help and commitment during SKYWARN activation.

During the 24-hour special event, amateur operators will visit their local NWS office and work as a team to contact other Hams across the world.

Note: for more information contact George (W8WFG), w8fwg@arrl.net or your local NOAA center.

OUT OF PRINT MANUALS AND SCHEMATICS

Just some info for the Club...I had tried for many years to get a manual for some of my gear, including the Collins 312B-5 (long out of print), and recently had success. I thought I would pass this source along, for those also trying to find older manuals.

Manuals for:

Hallicrafters, Hammarlund, Natinal, Globe/WRL, Heathkit, Allied/Knight, Johnson, Viking, Elmac, Gonset, Eico, B&W, RME, Conar, B&K, Harvey Wells, Morrow, Lafayette, Mosley, Drake, Regency, Ameco, Clegg, Genavem, Utica, Polycomm, Pierson, Davco, Archer/Realistic, Subraco, RCA, Wimpson, Triplett, HP, Superior, Swan, Howard, Echolphone, Millen, McMurdro Silver, Paco, Precision, and more.

Alvin J. Bernard
P.O. Box 690098
Orlando, FL 32869-0098
Phone: 1-(407)-351-5536
E-Mail: ni4q@juno.com

Submitted by Roland (KB8XI).

HARC's 440 REPEATER BACK ON LINE:

The Husky Amateur Radio Club has announced that their +444.500 MHz, 5 MHz offset is back in operation once again.

Source: Glenn Ekdahl, WA8QNF

{Thanks Glenn, for the update}

VANITY CALL SIGN DELAYS

The FCC has halted all issuances of Vanity Call signs until at least late December. (They are giving a date of approximately Dec. 22, 2005). The reason for this is because of Hurricane Wilma, in the southern states. Please watch for further bulletins from the FCC in their Public Notices or from ARRL Hq in the form of a bulletin.

CCRAA Officers:

To: Officers of the CCRAA We've been waiting to hear from you (officers) on this revised report).

As of this date we haven't heard anything!

Please reply as soon as possible?

Radio Operations Committee Report (Revised)

Special Meeting of June 11, 2004

Members present:

Gary Hansen, K8YSZ
Charles Savolainen, WB8FCY
George Thurner, W8FWG

Members Absent:

Bryan Suits, WB8WKN
Douglas Polzien, N8KSO

SURPLUS EQUIPMENT SALE:

Once a final approval is made, a list of equipment will be made available in a future newsletter.

Note: see Policy of Selling Surplus CCRAA Equipment.

POLICY OF SELLING SURPLUS CCRAA EQUIPMENT:

1. Club's officers should decide if they want to dispose of the equipment in question.
2. It is suggested to post the surplus equipment in the "Landline" (Club Newsletter) with a brief technical description of the surplus equipment.
3. Sealed bids (envelope within an envelope) with the buyers name on the outside of the inner envelope and the bid they wish to place for the equipment inside the envelope.

Also the item to be bid on, shall be listed on the outside of the inner envelope.

4. Bids shall be from paid subscribers to the CCRAA, Inc. only. (A membership service).
5. Bids shall arrive by USPS only (not E-Mail), and not by courier, delivered to a meeting.

Our reason for this is, that E-Mail subscribers receive the newsletter several days earlier

than USPS. (See also Item #6)

6. In the case of duplicate bids, the earliest postmark is awarded that bidder.
7. No bids shall be postmarked earlier than the 15th of the month, following the announcement in the CCRAA's newsletter, and end at the last day of that month.
8. Any bid received out of this time frame shall be rejected by the officers of the CCRAA, Inc.
9. The club's officers shall place a minimum bid on any items offered as surplus.
10. If payment is not made within 30 days, to the CCRAA, Inc., the bid may be rejected
11. Any accessories to be included with the item shall be listed to the prospective buyer:
Example: "XYZ Transceiver, includes microphone and power supply."
12. The club's officers shall determine an effective date (start date) of this policy.
13. OMIT.
14. Payment can be made to the club with check or money order only.
15. OMIT

16. These rules (as amended by the CCRAA membership, at a regularly scheduled meeting)

shall be printed in the Landline, with each item that is offered as surplus.

These rules are the rules suggested by the Radio Operations Committee at their June 11, 2004 meeting, and are subject to the approval of the CCRAA membership] *When the final rules are approved by the club, the Officers of the CCRAA, Inc. shall indicate a start date for this proposal to take effect, to the Editor of the CCRAA Newsletter, and will be published in the next newsletter, so that all members will understand the process of obtaining surplus equipment from the club..*

Repeaters & Local School Projects:

There is no new information on the status of the 70cm or 6mtr Repeater sites.

As for the Local School Projects, research & planning have started, but it is unknown at this time the status.

Support for Salvation Army:

For a number of years now the CCRAA has rang the bell for the Salvation Army the Saturday before Christmas. Would you help me get the word out that I signed the club up to do it again this year. Members should contact me for one hour assignments -- two people each hour if we have enough. It will probably be at Festival Foods (if not it will be at an indoor location) and we will person the spot from 9am to 9pm.

Thanks: Rich Brooks (KB8FCX) (370-9103 or 906-201-0849 or by email: rbrooks@pasty.net.

POLICY STATEMENT:

The CCRAA has started what is called a Policy Statement and we will print it here for your benefit. Rather than modify the Constitution of By-Laws, the Secretary of the Club will be keeping a record of these policies within the club and as new ones are added we'll print them here. The Policy Format will be as follows:

1. Year and Policy Number for that year.
2. Date (MM/DD/YY) and the date of the meeting where it was approved.
3. Title of Policy
4. Purpose of the Policy.
5. Section Numbers (as many as are necessary) (Sub-Paragraphs)
6. By-Law# (RULES) amended upon approval of the membership.

The Secretary will keep a record and update the constitution as necessary.

Source: January-2005 "Landline"

RADIO REFERENCE SITE:

The very first site to receive the MT Internet Excellent Award is <http://www.RadioReference.com> – the creation of Lindsay Blanton. The RadioReference site grew up with trunking, coming on line to help the hobby figure out this new, puzzling technology. It has grown to become a huge database, including conventional frequency assignments, trunked radio system information, frequencies, and talkgroups, but it's more than that. You'll also find FCC License assignments and maps, 10-Code Lists, agency maps, files, downloads, links, and detailed agency information for most public safety, military, and local government activities, as well as hosting very active forums with over

145,000 posts.

Source: We first heard about this site from Ed, WB8CBA.....thanks Ed, it's a good one!)

Transmitter Move:

We are happy to announce that on February 2, 2005 the Federal Communications Commission (FCC) approved a request for WMTU to move its transmitter and increase its power. In the next few months WMTU will prepare to move 5 meters HAAT (Height Above Average Terrain) to 146 meters HAAT. Along with the change in location the station will upgrade power from 100 watts ERP (Effective Radiated Power) to 4400 watts ERP. These changes will allow WMTU to reach a larger listening audience, reaching new coverage areas as Calumet, Chassell, Lake Linden and South Range.

W8FWG Note: This is of special interest to us as "Hams"... as this new transmitter is in the same building with our "88" (Hancock) repeater, and its antenna will be just a few feet from ours!! We wish them luck, but we don't want any QRM from them either!! (No date is given for them to come on-line... it may go into next year)

FLASH! A LATE BREAKING STORY:

It was discovered in the early afternoon hours of Friday, November 25, 2005 that we have a defective dual-band antenna at CMX (Calumet...Osceola) serving our packet radio system. Because a new UHF antenna was put up this summer, and is not being used, the packet system was swung over to that one, and we now have restored our service to the south, to Herman, Iron River, Iron Mountain and points south. The packet radio system went back on the air at approximately 1510 hours EST today. I don't anticipate this dual-bander getting fixed anymore this winter, so it is..... "See you next spring"! Meanwhile, our packet radio system that operates on 446.3 MHz is now back in service. George (W8FWG)

RULES & REGULATIONS:

"Testing....1-2-3-4".....We often hear this on the repeaters, and it is good that you are able to test your rig.....but don't forget to add your call sign at the end of the test, for it is illegal to depend on the repeater to ID. **YOU** must also ID! See FCC R&R Part 97.119

A portion of this Rule is printed below for your review:

§97.119 Station identification.

(a) Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every ten minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station.

NEW TESTING FACILITY:

W8FWG has entered into negotiations with "NRE" the "National Radio Examiners" of Dallas, TX, in preparation of starting a new testing group in Michigan's Copper Country. This is a new team similar to the Volunteer Examiner Team for "hams", but it is for Commercial Licensing only. The new group will be known as UPRE, an acronym for "Upper Peninsula Radio Examiners", and is expected to be operational by the first quarter of 2006. The new team members are: Gary Hansen (K8YSZ), Charles F. Savolainen (WB8FCY), Danny L. Miller (KB8W), and George R. Thurner (W8FWG) (TCM) [Test Center Manager]. This group is independent of any radio club, but has examiners who belong to the local radio clubs. We will be working with the W5YI Group, of which Frederick O. Maia is the COLEM (Commercial Operator License Examination Manager). If you are interested in taking a commercial test, you now have the opportunity to do so, right here in the U.P. This is the ONLY examining point for commercial licensing in the U.P. The other four exam points are located in the LP. The test fee is \$35, and applications must be made in advance, with the TCM (George (W8FWG)).

Who needs a Commercial License now-a-days? There are several listed:

1. Anyone radio work done to ship radio or radar systems.
2. Any radio work done at a coast station.
3. Any radio repair work being done with ships or coast stations on Marine frequencies.
4. Any radio installation or repair work done for aircraft stations.
5. Any radio installation or repair of handheld radios that communicate with aircraft.
6. Any radio work done on International fixed stations or radiotelephone or radiotelegraphy stations.

Broadcast engineers need not be licensed anymore, and as of 1985, the Commercial Radiotelephone License of First or Second Class status have been changed to a "General Radiotelephone Operator License." (GROL)

Storm Damage Report:

The following is a shorten version of a report produced by George (W8FWG) of the resulting damage from NOAA weather issue of "High Wind Warning" of Wednesday, Nov. 9, 2005. The US Coast Guard tower & antenna had its bolts sheared off at the concrete mooring at Mt. Horace Greeley. The office of emergency measures in Houghton, Jack Dueweke (KC8NPI) was informed and telephoned George Thurner (W8FWG) who in turn made several contacts with local amateur radio operators for their assistance. Monitoring of shipping Freq's was performed by K9GIR, K8YSZ, W8FWG, W8UXG, KC8NPI and N8WAV. Additional help was given to the US Coast Guard with there installing of a antenna and feed-line on a Light-pole and there communications was back up and running.... A complete report was prepared and issued to EC's, NOAA, OEM and other organizations.

To receive a more detail report and photo's, please e-mail George (W8FWG) via w8fwg@arrl.net

REPORTS OF STANDING COMMITTEES

PUBLIC SERVICE: Jack (N8WAV) reported on the hours hams contributed in the past month. Eight hundred hours went into the LSPR, 15 into search and rescue, and CCRAA MEETING: Held October 1, 2005 at the clubhouse.

The meeting was called to order by President: Lee (KC8DYG) at 7:08. Motions to accept the secretary's: Rich (KB8FCX) minutes of the September meeting as published in the e-Landline and the treasurer's: Paul (W9ULM) report given verbally were supported and passed.

42 on Pumpkin Patrol (City of Houghton).

Jack (KC8NPI) reported that the Department of Homeland Security might be tapped for a new antenna for 67. The discussion that followed pointed out 67 problems are likely feed-line related since antenna is only a few years old.

RADIO OPERATIONS: Chuck (WB8FCY) reported the 67 repeater has been winterized and that 18 watts were measured going up the feed-line.

PROPERTY: George (W8FWG) The clubhouse was cleaned and the generator given its monthly check.

EDUCATION: George (W8FWG) The next VE test will be January 21, 2006 in room G04 Wads, MTU.

Lee (KC8DYG) and Jon (N8HZH) reported considerable interest in ham radio at the Jeffers High School. Mike Benda, Teacher at Jeffers was also in attendance. The group of 15 students has acquired quite a mix of ham equipment and a antenna. A 1938 Jeffers graduate donated most of the equipment.

OLD BUSINESS

It was moved, seconded and passed to sell Chuck (WB8FCY) for \$25 a ground box required by Alltel but never used.

NEW BUSINESS

The need for a new feed-line for 67 will be researched. George (W8FWG) will coordinate.

MTU's 444.5 repeater is operational.

A nominating committee is needed. Howard Klann (KD8ABP) volunteered hopping Doug (N8KSO) would assist.

The club Christmas party will follow the December 6, 2005 meeting. The format will follow that of past years – potluck, but twenty-five dollars was allocated to purchase additional refreshments.

Twenty-six people, including two officers, were in attendance. Adjourned at 8:03.

Next meeting: January 3, 2006, Dollar Bay Fire Hall 7:00pm

The **ALANDLINE@** is published monthly by the **Copper Country Radio Amateur Association, Inc.** Contributions for use in the LANDLINE, relating to the amateur radio service and to the CCRAA are welcomed at any time. Please submit your contributions directly to the editor, and they should be received by the 25th of the month before the meeting. Material received later may or may not make it into that issue. The LANDLINE Editor is Howard F. Klann, KD8ABP. If you have a question or a comment I can be reached at: (906) 337-2168 or E-mail to: msgklann@pasty.net. E-Mail copies are sent by Howard, KD8ABP. Complimentary copies to other radio clubs and the USPS copies are mailed by George, W8FWG. Please refer any delivery problems to the Editor (Howard, KD8ABP) at (906) 337-2168. To find out more about the CCRAA Inc. or the Amateur Radio Service, please contact one of the officers listed below or write to the **CCRAA, POB 217, Dollar, Bay, MI 49922-0217** or visit us on the web: www.ccraa.net **Ask for our new FREE booklet for new prospects to ham radio, for your friends who may be interested in ham radio. It's available in Adobe E-Mail format or via USPS.**

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(Place mailing label here)

NEXT MEETING

January 3, 2006

DOLLAR BAY FIRE HALL

DOLLAR BAY MI 49922

TIME: 7:00 PM EASTERN Standard Time