

**Northern Colorado Amateur Radio Club**

P.O. Box 272956

Fort Collins, CO 80527-2956

# The Tribander

The monthly Newsletter of the Northern Colorado Amateur Radio Club  
For FEBRUARY 2012

Club Meetings are held on the 3<sup>rd</sup> Saturday of each month

**\* LOCATION for FEBRUARY 18\***

**Golden Corral**

**1360 Sculptor Drive**

**Loveland, Colorado**

**Across the parking lot from Kohl's on East Eisenhower**

All (Friends, family& kids) are welcome and encouraged to attend.

Bring yourself and your appetite at 8:00 am.

The Meeting begins at 9:00 am.

# NCARC Club Information

## ELECTED & VOTING OFFICERS and OFFICIALS

POSITION	NAME	CALL SIGN	PHONE	E-MAIL
President*	Chris McNair	KDØEGE	970-372-9842	president@ncarc.net
Vice President*	Willie Williams	W5WIW	970-454-3821	vp@ncarc.net
Secretary*	Jerry Williams	KE5INP	970-454-3821	secretary@ncarc.net
Treasurer*	Tim Cottam	WØTJC	970-225-6566	treasurer@ncarc.net
Station Trustee*	Tom Jungmeyer	K1TJ	970-484-8329	controlop@ncarc.net
Technical Committee	John Wells	KBØNE	970-214-1653	techchair@ncarc.net
Public Affairs Officer	Eugene Bentz	KI6MPA	970-371-2446	pao@ncarc.net
Member at Large	Bill Abbott	WBØZVE	970-232-8033	wb0zve@hotmail.com
Former President	Willis Whatley	WA5VRL		whatley@frii.com

\*Members of The Executive Committee

### **Comittee contacts:**

Newsletter Coordinator***	John Wells	KBØNE	970-568-7646	newsletter@ncarc.net
Hamfest Chair***	Charles Hess	KDØGMW	970-667-4357	hamfest@ncarc.net
Web Coordinator***	Eugene Bentz	KI6MPA	970-371-2446	Webadmin@ncarc.net
Interference Coordinator***	Justin King	NØAOL	970-290-9045	interference@ncarc.net

\*\*\*Appointed Non-Voting Club Official

## NCARC Repeaters

<b>W0UPS: 145.115 MHz</b> – (144.515 MHz Input) 100 Hz CTCSS Subtone (1* on, 0* off) Autopatch <b>Echolink Node 4236</b> (40-32.926N, 105-11.898W, 7229 ft) Horsetooth Mountain, west of Fort Collins, CO <b>ARES &amp; Skywarn nets.</b>
<b>W0UPS: 447.700 MHz</b> – (442.700 MHz input) 100 Hz CTCSS Subtone Located on Buckhorn Mountain. (GPS: 40.6169, -105.3274) , west of Fort Collins, CO
<b>W0UPS: 447.275 MHz</b> – (442.275 MHz input) 100 Hz CTCSS Subtone Autopatch (40-32.926N, 105-11.898W, 7229 ft) Horsetooth Mountain, west of Fort Collins, CO
<b>W0UPS: 224.520 MHz</b> – (222.920 MHz input) 100 Hz CTCSS Subtone (40-32.926N, 105-11.898W, 7229 ft) Horsetooth Mountain, west of Fort Collins, CO
<b>W0UPS: 146.625 MHz</b> – (146.025 MHz Input) 100 Hz CTCSS Subtone <b>[Will be relocated at some time... details as they become relevant]</b> (40-50.266N, 105-3.017W, 5600 ft) SW of the Rawhide Power Plant, 17.5 miles north of Fort Collins, CO
<b>W0UPS: 146.850 MHz</b> – (146.250 MHz Input) 100 Hz CTCSS Subtone (1* on, 0* off) (40-25.341N, 104-44.182 W) Greeley, CO
<b>W0UPS-5: 144.390 MHz</b> – APRS Digital Repeater (40-32.926N, 105-11.898W, about 7229 ft) Horsetooth Mountain, west of Fort Collins, CO
<b>W0UPS: 448.025 MHz</b> – (443.025 MHz Input) 100 Hz CTCSS Subtone <b>ARES Repeater</b> (40-26.650N, 104-59.370W, about 5192 ft) Budweiser Event Center on I-25 at MM259
<b>W0UPS: 145.205 MHz</b> – (144.605 MHz Input) 100 Hz CTCSS Located on Buckhorn Mountain. (GPS: 40.6169, -105.3274) Link to 224.840 by touch tone 10* - unlink with 11*
<b>W0UPS: 224.840 MHz</b> – (223.240 MHz Input) 100 Hz CTCSS Located on Buckhorn Mountain. (GPS: 40.6169, -105.3274) Link to 145.205 by touch tone 10* - unlink with 11*

## Nets

<b>ARES HF Net</b>	<b>Sunday</b>	<b>8:00 am</b>	<b>~3.81 MHZ LSB</b>
<b>Pine Beetle Net</b> 	<b>Sunday</b>	<b>~9:00 am</b>	<b>145.205 MHz 447.700 MHz</b>
<b>ARES Statewide VHF Net</b>	<b>Sunday</b>	<b>8:00 PM</b>	<b>145.310 MHz</b>
<b>Central Colorado Traffic Net</b>	<b>Daily</b>	<b>7:30 pm</b>	<b>145.310 MHz</b>
<b>Tech Net</b>	<b>Wednesday</b>	<b>7:00 pm</b>	<b>145.115 MHz</b>
<b>ARES District 10 Information Net</b>	<b>Thursday</b>	<b>7:00 pm</b>	<b>145.115 MHz</b>

## Web Page

<http://www.ncarc.net>

## **NCARC ACTIVITY**

January 21, 2011

The NACRC **WINTER HAMFEST 2012** was held at the Larimer County Fairgrounds Thomas M. McKee Building in Loveland. There was no regular club meeting since this activity was on the same day as our normal breakfast meeting.

----- From Randy Long, K7AVV-----

I'd just like to say a huge THANK YOU to Charles, Ed, Willie, Eugene, Tim and ALL of the folks who came and who helped set up and run this year's Hamfest!!! Good job!!! It seemed to be well attended by vendors and patrons alike. I understand the VE Testing Component was a huge success with over 25 people walking away with either a CSCE and or a new upgrade!

The folks who Set up on Friday, the workers running the show and then breaking it down once it was done did a GREAT Job!!!

I know that Eugene, KI6MPA recruited non hams to help and hope he will pass along a heartfelt thanks for their help in pulling off a great event!

It is an event that no one can do alone and want people to know, I for one recognize the work that went into making it what it was.

I'm just a member who appreciated seeing the folks work together for the club which benefits the Northern Colorado Amateur community and the community at large. Thanks!

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-----More from Randy Long, K7AVV-----

This might be something of interest for the membership... Certainly something they might want to keep track of. It comes from a list group called HF PACK that is a group of QPRers and man pack radio enthusiasts.  
Randy

(Editorial note... I did do some fact checking and found that this is a real situation, however, the theory that tin whiskers are the cause of the infamous Toyota runaway accelerator pedals in cars is still being debated.)

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Is Your Radio Growing Whiskers? --an article by Bonnie Crystal KQ6XA

Your radio may be secretly growing whiskers inside it, if it was made after 2005. These tiny whiskers may

eventually bring failure.

Solder containing the element lead (Pb) has been eliminated from many electronics products due to ROHS. Restriction Of Hazardous Substances... a directive adopted by the European Union (EU) that took effect on 1 July 2006. (Usually the acronym is pronounced 'ROW-HOSS' ED).

Even if you don't live in EU, this still can affect you, because most manufacturers in Asia (and almost everywhere else ED) adopted ROHS production processes in 2005 to enable their products to be sold worldwide.

Solder made of lead and tin has long been used in electronics. One big advantage is the lower melting point, the components are not overheated. Many experts warned EU that taking all lead out of electronics soldering could cause huge problems, and possibly even deaths due to the microscopic conductive whiskers that form on the surfaces and edges of the element tin (Sn). These tiny pointed strands grow when they interact with air... when they get long enough, they can short out across the air gap and insulators in components and printed circuit boards.

Perhaps it is happening right now inside the radios of your ham station.

I think I will hang on to my out-dated radios with their old-fashioned lead solder. It seems like the value of them just went way up!

-by Bonnie Crystal KQ6XA, VR2KQ6XA  
(c)2012 HFpack, Inc.

For more information and microscopic tin whisker photos, see the recent NASA study. Click here:  
(Toyota break pedal potentiometer):

[http://nepp.nasa.gov/whisker/reference/tech\\_papers/2011-NASA-GSFC-whisker-failure-app-sensor.pdf](http://nepp.nasa.gov/whisker/reference/tech_papers/2011-NASA-GSFC-whisker-failure-app-sensor.pdf)

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More editorial notes:

In high impedance electronic circuitry, quite often conductive contamination between circuitry in the form of poorly cleaned solder flux or carbon/biological paths will cause the same kind of poor electronic performance. Sometimes a good cleaning with isopropyl alcohol and a brush (or at worst, a good bath with soap and water) may clear things up. PS **thoroughly dry** the device before repowering.

Unfortunately finding whiskers may involve using a microscope to see them. If you honestly think that tin whiskers may be a problem then the application of a **very small** amount of Lead/Tin solder will clean and prevent whisker growth. One article I read said that as little as 3% lead added to ROHS tin solder will stop the whiskering. There ain't nothin' more fun than reflowing a bazillion fine pitch solder joints.....

ED

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----- Update on sign interference, from Justin King: -----

Background: Several electronic (LED) commercial display signs around the Fort Collins area produce significant RF interference on some of the 2 meter radio frequencies and probably elsewhere. This has been an ongoing problem that needs resolved.

update - DaVinci Signs

Jan 11, 2012:

I got a call from DaVinci Signs that both locations in question on 287 have now been properly grounded per the manufacturers specifications and they are hoping that the issue has been resolved. If anyone goes by either location before I get the chance please email me and let me know if the interference is gone or not.

Jan 18, 2012:

I received a phone call today from Laura Smith with the FCC and they will be sending the initial enforcement notice letter to DaVinci Sign Systems. She needed a little more information from me before they could do that.

Also I have spoken now directly to the person at DaVinci that was point on point to address the issues with the two signs and he was disappointed that their first attempt did not resolve the issue. So they are going to go back to the drawing board and get the manufacturer involved again. The first idea was to ground the signs per the manufacturer's request and did nothing.

That is it for now, thank you for your time!

Justin

The cause Coordinator of Interference

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Of note: K1TJ has re-submitted a re-coordination request to move the 146.625 repeater to the Buckhorn repeater site. This would improve coverage as compared to where it is now located, near the Rawhide Power Plant.

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My friend Mike sent this to me.... I could only make it half way through so PLEASE remove my name from your tower climbing e-mail buddy list. 8-O [Light bulb changer 1768 feet straight up ... It is incredible what people do for a living! Just wait for the cartoon intro to finish, then hold on to your seat.](http://www.liveleak.com/e/07b_1284580365)  
[http://www.liveleak.com/e/07b\\_1284580365](http://www.liveleak.com/e/07b_1284580365)

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"Nuff outta me for now!

John KB0NE 73s and see you at the next Golden Corral NCARC meeting.



# Northern Colorado Amateur Radio Club

## Membership Application



I want to Join the NCARC.

Please Renew my membership

Date: \_\_\_\_\_

For calendar year:

2011

2012

2013

**Annual Dues -- All memberships expire December 31<sup>st</sup>**

**Individual or Family Membership:** \$25.00 per year

**Full Time Students:** \$ 5.00 per year

Name: \_\_\_\_\_

Callsign: \_\_\_\_\_

Street: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

License Class: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Newsletter by Email?            YES    NO

Student?                            YES    NO

ARRL Member?                    YES    NO

### Family Members

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Callsign: \_\_\_\_\_    ARRL? YES NO

License Class: \_\_\_\_\_

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Callsign: \_\_\_\_\_    ARRL? YES NO

License Class: \_\_\_\_\_

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Callsign: \_\_\_\_\_    ARRL? YES NO

License Class: \_\_\_\_\_

**Note additional family members on reverse**

*We do not sell, trade, or rent personal identification information to others.*

See full Privacy Policy at <http://www.ncarc.net>

Please mail this form and payment to:

NCARC  
P.O. Box 272956  
Fort Collins, CO 80527-2956

### Club Use:

Received: \_\_\_\_\_ Amt: \_\_\_\_\_

Recorded: \_\_\_\_\_ Version 20111114.1

**Or Sign-up Online at [www.ncarc.net](http://www.ncarc.net)**