

**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**

**Club Meetings are held on the 3<sup>rd</sup> Saturday of each month  
At the Golden Corral, 901 E. Harmony Rd, Fort Collins, CO.**

**All 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

## Club Officers

President	Steve Henry	N7GN	(970)226-2817	<a href="mailto:n7gn@arri.net">n7gn@arri.net</a>
Vice President	Eric Slutz	N0EAS	(970)282-3752	<a href="mailto:eric@redginger.com">eric@redginger.com</a>
Secretary	Dave Langenberg	KC9FOO		<a href="mailto:dave@thelangenbergs.com">dave@thelangenbergs.com</a>
Treasurer Membership Chair	Willis Whatley	WA5VRL	(970)407-6599	<a href="mailto:whatley@frii.com">whatley@frii.com</a>
Interference Coordinator	Mike Bates	N7DQ	(970)219-3225	<a href="mailto:n7dq@comcast.net">n7dq@comcast.net</a>
Newsletter	Willis Whatley	WA5VRL	(970)407-6599	<a href="mailto:whatley@frii.com">whatley@frii.com</a>
Technical Chair	George Salzmann	AB0SF	(303)961-0841	<a href="mailto:ab0sf@yahoo.com">ab0sf@yahoo.com</a>
Hamfest Chair	Michael Robinson	N7MR	(970)225-7501	<a href="mailto:michael@frii.com">michael@frii.com</a>

## NCARC Repeaters

<b>W0UPS: 145.115 MHz</b> – (144.515 MHz Input) 100 Hz CTCSS Subtone (1* on, 0* off) Autopatch (40-32.926N, 105-11.898W, 7229 ft) Horsetooth Mountain, 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, 7230 ft) Horsetooth Mountain, west of Fort Collins, CO
<b>W0UPS: 146.625 MHz</b> – (146.025 MHz Input) 100 Hz CTCSS Subtone (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

## Nets

ARES District 10 Information Net	Wednesday	9:00 pm	145.115 MHz
ARES Statewide Net	Sunday	8:30 pm	145.310 MHz
Central Colorado Traffic Net	Daily	7:30 pm	145.310 MHz
Tech Net	Tuesday	7:00 pm	145.115 MHz

## Web Page

<http://www.ncarc.net>

**TECH NET Announcement!**

This is a reminder that the 145.115 TECH NET is held Tuesday evening 07:00 PM.  
It is hosted by N0WIQ, Kerry. All amateur radio operators (with 2M privileges) are welcome to check in. It is an open forum net with Questions, Answers and Topics of interest.

If the 145.115 repeater is not available, the net will be held on the 447.275 repeater

**CW Practice Session!**

This is a reminder that the 145.115 CW Practice Session is held Friday evening 06:00 PM.  
It is hosted by WOEP, Chris. All amateur radio operators (with 2M privileges) are welcome to check in or listen.

# **NCARC Winter Superfest**

**Saturday, January 20, 2007**

**Lincoln Center's Canyon West Room: 8am - 2pm**

**Vendor setup begins at 6am.**

**Tables \$5 includes 1 admission**

**Doors open at 8am**

**Admission \$5**

**VE Testing in the Ludlow Room begins at 9:30am**

**Lincoln Center  
417 W. Magnolia St.  
Fort Collins, CO 80521**

**Prizes to be announced**

**Flyer and more information on our Webpage:**

[www.ncarc.us](http://www.ncarc.us)

[www.ncarc.net](http://www.ncarc.net)

**Contact Michael, N7MR**

**970-225-7501**

**970-282-1167**

[michael@frii.com](mailto:michael@frii.com)

**The Rat Race  
The 2<sup>nd</sup> Saturday in August  
Ault, Colorado**

**10K run 5K run/walk, 2K fun run, mini kids run. Race begins at 7:30 a.m.  
Radio operators usually need to arrive by 6:30 a.m.**

**This is an early morning event that is completed well before noon.  
Contact K0OJ at (970) 353-7094.**

**Some Other Upcoming Swapmeets**

**Pikes Peak Radio Amateur Association Inc.**

**MEGAFEST**

**07/08/2006**

Just East of I-25, between Exits 158 & 161

**6' TABLE RENTAL:**

(Does NOT include admission)

One chair per table included with table rental

**IN ADVANCE.....\$10.00**

**AT THE DOOR.....\$15.00**

**ADMISSION: \$5.00**

Lewis-Palmer High School, 1300 Higby Rd. Monument Doors Open at 8 AM

Vendor setup beginning at 6 AM

For more info: <http://www.ppraa.org>

**Denver Radio Club Hamfest**

**08/20/2006**

Jefferson County Fairgrounds in Golden 8:30 AM - 2 PM

Table Cost: \$10.00 Admission: \$5.00

Note Table price DOES NOT include admission

For more info: <http://www.qsl.net/w0tx>

**Mountain Amateur Radio Club MARC Campfest**

**08/25/2006**

8649 Main Street (Not Hwy 24) Lake George, Colorado

For more info: <http://www.qsl.net/nx0g> or contact Paul Moraine at 719-638-0273

**BARC Fest**

**09/24/2006**

Vendor Setup beginning at 6:00 AM

Doors Open to all at 8:00 AM

Boulder County Fairgrounds

9595 Nelson Road (corner of Nelson and Hover Roads), Longmont

Talk-in on 146.700 (-) Repeater

Admission \$5

Door Prizes Drawn Every Hour!

Breakfast & Lunch by Papa Carr BBQ Catering

Boulder VE Team – License Exam Testing Held at 10AM Sharp!

For More Information Contact: [BARC70@arri.net](mailto:BARC70@arri.net)

**New and renewing members for June:**

N0WOZ – Barry N7DQ – Mike KC0VXL – Glen KC0VXK – Randy N0XGN – Jeff

**The NCARC thanks you for your support.**

**HamCom 2006 note:**

On 18 June 2005, the NCARC provided \$100 in “seed money” to HamCom Colorado, Inc. for the event to be held in June of 2006.

On 19 June 2006, the NCARC received a payment of \$153.28 from HamCom Colorado, Inc. as our share of the profit from the event.

**Local Area Swaplists:**

For those who can not wait or can not attend the area swapmeets, below are the websites for some of the regional swaplists found on the internet. These are updated weekly.

Aurora Repeater Assn. Swaplist: <http://www.qsl.net/n0ara/swaplist.html>

Colorado Repeater Assn. Swaplist: <http://www.w0cra.org/swap/craswaplist.htm>

Wyoming Swap Shop: <http://www.qsl.net/n0ara/wss.htm>

New Mexico Swaplist: <http://bc-ares.org/swapnet/listings.html>

## Welcome new ham radio operators!

LRA and NCARC jointly sponsored an amateur radio technician class during May and June. We just graduated our class—and what a success it was! We had 17 new techs and 1 new general as well as 4 passing Morse code tests. Most of these new hams are very interested in providing emergency communications assistance and will become active in one way or another in local activities. If you hear any of the following folks on the local repeater, please welcome them to the hobby:

David Lee	KC0WZP	Daniel Lee	KC0WZQ	Jeff McChesney	KC0WZR
Jason Wilson	KC0WZS	Gordon Stockdale	KC0WZT	Marion Smith	KC0WZU
Mark Minor	KC0WZW	Wayne Smith	KC0WZV	Harry A Minor	KC0WZX
Brad Cook	KC0WZY	David Vickers	KC0WZZ	Aaron Friesen	KC0YAA
Terrance Parker	KC0YAB	Emily Baldwin	KC0YAC	Ray Offuff	KC0YAD
Tomoo Taguchi	KC0YAE	Aaron Krebs	KC0YAF		

And a new general class: Roger Brown KC0YAG

I'd like to especially recognize those who helped teach the class, provided support by answering questions and attended each week as well as those who helped out in the VE testing sessions. If you are in contact with any of these fine folks, please thank them for helping out! As you can tell, it takes quite a cast to make these classes a success:

Mike Hickerson	W0MBH	Leslie Hickerson	W0SXY	Kerry Miller	N0W1Q
Rick Kile	WA7BNG	Rob Strieby	W0FT	Bob Schmit	WA9FBO
Dave Coombs	K0EUS	Leon Miller	NE0N	Chester Norris	KC0DSJ
John Schmidt	NK0R	Mike Bates	N7DQ	Minor Cross	K7YJ
Judy Cross	WZ7S	Tom Levendusky	AC0CH	Bob Scheib	WA0EYJ
Dick Reeve	KB0WWA	Mike Hall	W0CMH	Steve Henry	N7GN
Dwight Stull	W0DWI				

'73,  
Steve Henry  
N7GN

### §97.401 Operation during a disaster.

(a) When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, in an area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential communication needs and facilitate relief actions.

(b) When a disaster disrupts normal communication systems in a particular area, the FCC may declare a temporary state of communication emergency. The declaration will set forth any special conditions and special rules to be observed by stations during the communication emergency. A request for a declaration of a temporary state of emergency should be directed to the EIC in the area concerned.

(c) A station in, or within 92.6 km of, Alaska may transmit emissions J3E and R3E on the channel at 5.1675 MHz for emergency communications. The channel must be shared with stations licensed in the Alaska-private fixed service. The transmitter power must not exceed 150 W.

**§97.403 Safety of life and protection of property.** No provision of these rules prevents the use by an amateur station of any means of radiocommunication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

### §97.405 Station in distress.

(a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.

(b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a), of any means of radiocommunications at its disposal to assist a station in distress.

## NCARC **April** Meeting Minutes

April 15, 2006

Location: Golden Corral

Called to order by Steve Henry at 0900 hrs MDT.

22 Members and 2 guests present

### REPORTS

#### Secretary

--Minutes Approved as Read

#### Treasurer

--Savings unchanged

--Checking \$11712.48

#### Tech Committee

--No report

#### Membership/Newsletter

--Did get some pictures

--Started putting in swap list

--Request for any articles or pictures to be put in the newsletter

--Membership slow this month 100-120 paid members

-- roster update this month may go into newsletter

#### Control Op

--Still need to update the announcement for Greeley

#### Interference

--Same static seems to be getting better

#### Fest

--Go for McMillen bldg at old Co fairgrounds

--Loveland no longer taking reservations for McMillen bldg

--Having trouble with other locations. Looking for suggestions from the membership

--Lincoln Center

--Loveland Airport Hangar

--Mervyns Bldg

--CSU Bldgs

### OLD BUSINESS

#### Events Center Repeaters

--Richard Walters inspected the site

--Equipment set to go up there

--ATV repeater going up there in addition to the 2M repeater

#### HamCon

-- 9-11 June

--Get in your registration.

--Riley will be in on Fri and will be Keynote

--COO of ARRL will be there for Sat breakfast

--hamconcolorado.org

--Ask for convention rate at the Estes Park Holiday Inn

--Need Talk-in volunteers for Sat PM

#### Website Update

-- Ed Gage continues to update the website (2 addresses that point there NCARC.US and the older one off of Earthlink)

-- NCARC.net is reserved for us and we're going to get that pointed

#### Old Town Marathon

- Sunday May 7 Colorado Marathon (Ft Collins Old Town Marathon)
- 5 slots still open
- Starts at Stevens Gulch about 6am
- Running against traffic
- Somewhere between picnic rock and Ted's place they'll be directed to south side of road & then they get off the road further down
- Need names and T-shirt sizes

#### APRS Station at Horsetooth site

- Working great
- starting to get markers from WY

#### NEW Business

#### Ed Gage contacted Bud Stanley --

- New antennas in Greeley near S part of town
- talked about 25/85 repeater moving there or staying
- Club decided to keep the repeater where it is.

#### ARES

- Next Saturday event
- Tune into ARES net Wed if you're interested

#### Field Day

- Colorado Mountain Moguls -- Jim Crawford's place 4th place in 4A. Looking for CW ops.
- Looking for folks interested in running field day this year

#### BARC Jr. presentation at the Wayside Inn May 6th

- Idea about starting NCARC Jr. was floated

#### 10-11 folks interested in a Ham Radio Class

- thoughts are Thursday PM
- Looking for instructors

#### NCARC **May** Meeting Minutes

from Steve Henry

May 17th, 2006

Location: Golden Corral

Steve, N7GN called the meeting to order at 9:05 am. Approximately 25 members were present. Officers present were Willis (WA5VRL), Mike, (N7DQ), Steve, (N7GN), and George (AB0SF).

Since Dave Langenberg (KC9FOO) wasn't able to attend the meeting, only abbreviated minutes are available:

#### Reports:

Membership: (Willis, WA5VRL)-we have had 6 renewals and 1 new member.

Treasurer's report: (Willis, WA5VRL) - We have \$2149.82 in savings and \$11466.20 in checking. We are solvent.

Tech committee: (George, AB0SF) - George has been able to clear some of the noise out of the 145.115 system but we are still having issues.

Interference: (Mike, N7DQ). No interference has been reported.

Old business:

We had a lengthy discussion about the noise problems on the two meter 145.115 repeater. George has done lots of analysis and has concluded that the antenna is the likely culprit. In addition, there has been a long-standing history of intermittent noise whenever medium to high winds are occurring at the repeater site. A motion was made and seconded to "Purchase a new 2M antenna, jumpers, connectors and required labor (not to exceed \$2000) for installation at the Horsetooth site". The motion was approved unanimously.

Rick, W0RCY requested volunteers to help at the Cast for Kids event to be held on June 10th.

K0OJ reminded everyone about the Pizza bash to be held on June 5th at 5:30 PM at Woody's in Fort Collins.

NCARC/LRA sponsored ham radio class. Steve, N7GN reported on the ham radio class being held in Loveland. About 25 have been attending off and on and the test session will be held on June 15th. Many are interested in joining one or both of the clubs and in participating in emergency communications.

New business

No new business was brought before the club.

We had a presentation by Slate, N0TQN on the 2 radio telescopes near Boulder and their history.

Respectfully submitted,  
Steve Henry, N7GN

#### NCARC **June** Meeting Minutes

June 17, 2006

Location: Golden Corral

Called to order by Steve Henry at 0900 hrs MDT

14 Members and 1 Guest present

#### Reports

##### Secretary

-- Minutes approved as read

##### Treasurer - checking \$11513.98

-- 6 renewals

-- renewed liability insurance, coverage through July 2007

##### Control Op

-- Steve made an update for Greeley VE Message

-- Steve also turned on CTCSS output tones to help with the noise. He did remark about the timing being off on the 440 machine such that you couldn't hear the courtesy tone.

##### Interference

-- noise seems to be better on 2M

-- some folks talking about noise on the 440 side, but not corroborated

#### Fest Committee

- McMillen building is no longer an option. It will be a pile of rubble by the time the fest arrives
- Lincoln center has room for us. Not quite as large a room as McMillen.
- 110 6' tables \$540 bucks (\$700 was the usual total for McMillen)
- \$25 – 50 for kitchen, if we want it
- VE room extra \$120
- charge includes setup, regular cleanup
- 6 am - 2 PM we could narrow this down if we wanted to
- access to main parking on West side and 3 doors for vendors
- can limit customers to main doors for normal access
- must pay in full, no refunds
- Date Jan 20, 2007 (third Saturday in Jan.)
- Willis motioned to go forward with Lincoln center with kitchen and separate test room -- seconded by AB0SF, approved unanimously

#### Tech Committee

- ordered new 2M antenna. Rated to 125-MPH wind loads. \$908.73
- expecting new antenna to arrive in a week
- high hopes that this new antenna will fix the noise problems

#### OLD BUSINESS

Events center repeaters -- no report

#### Hamcon

- youth forums were not well attended
- lots of talk about getting in new hams
- folks were impressed with Riley
  
- W1AW was up. 6 meters opened along with 20.
- good sessions overall. Many wished there were sessions on Fri and Sat with repeats so folks could attend both
- would like to see more vendors
- good seminars – especially lightning seminar

#### CAST for Kids

- We had about 8 - 10 hams working the event
- portable repeater was setup on east shore -- worked great all day
- 30-45 handicapped kids who got to go out on the lake
- 50-60 other volunteers
- no accidents or problems
- wrapped up with BBQ

#### Pizza Bash

- thinly attended
- Switched to Mondays for monetary reasons -- 1/2 price pizza
- next one in Sept

#### NCARC Class

- class held in Loveland
- 17 techs came out of the class
- passed 2 generals & 2 tech+
- all interested in E-com
- looking to join club
- July 1 the license new book (question pool) comes into effect

[www.ncarc.net](http://www.ncarc.net) now points to our website -- actively updated

#### NEW BUSINESS

- August -- Tour de Cure (Aug 26th) we will need multiple operators
  
- Field day -- NCARC not doing anything, so go to Loveland (Mountain Moguls at Crowder's property)

## **Come learn about CWOP at the August 19 NCARC Meeting!**

For the August 2006 NCARC meeting, we are pleased to have a presentation by Russ Chadwick, KB0TVJ, on the Citizen Weather Observer Program (CWOP).

He is the founder of CWOP, the only large, widespread weather station network to provide quality-related feedback to citizen data contributors on a regular basis.

From the CWOP website (<http://www.wxqa.com>):

Many citizen weather stations are producing weather data today. When only the weather station owners use these data, quality is not an issue. With the communications revolution and the vast capabilities of the Internet, many people with weather stations are sending their data far and wide for other people to use. In that case, data quality matters.

"The Citizen Weather Observer Program (CWOP) is a private-public partnership with three main goals:

- 1) to collect weather data contributed by citizens
- 2) to make these data available for weather services and homeland security
- 3) to provide feedback to the data contributors so that they have the tools to check and improve their data quality. In fact, the web address, wxqa.com, stands for weather quality assurance. Tools that will help members improve their data quality are listed under the "Data Quality" link.

There are over 4,500 registered CWOP members world wide and a graph of the number of North American CWOP stations sending data over the past four days is shown under the older name APRSWXNET (APRS description). The number of worldwide citizen weather stations sending data through APRS-IS (Internet-Service) is shown for the past 48 hours.

Russ lives in Boulder, and is a native of Cody, Wyoming. He has degrees in electrical engineering from Montana State, University of Wyoming, and Purdue. Russ is a member of ARRL and TAPR, and a Senior Member, IEEE. He has judged at the Colorado Science and Engineering Fair for 33 years, was awarded Department of Commerce Gold Medal for exceptional service in 1993, and is the holder of 3 patents.

He has held engineering positions with Bureau of Reclamation, Institute for Telecommunication Sciences, Wave Propagation Laboratory, and Forecast Systems Laboratory. Currently he is Chief Engineer, Global Systems Division of NOAA Earth System Research Laboratory, Boulder, CO.

Among his other accomplishments, he developed the first clear air radar that detected aircraft wing tip vortices. He was the Chief Engineer and principal designer of first operational network of clear-air radar wind profilers.

This should be an excellent presentation. Invite your friends and neighbors.

Here is the CWOP page for K0UT:

<http://www.findu.com/cgi-bin/wxpage.cgi?call=K0UT>

