

The Repeater Rag

Volume 28 Number 3



NEWSLETTER OF
THE DENVER RADIO LEAGUE

**A CLUB DEVOTED TO
QUALITY AMATEUR RADIO**

Published in the Denver South Suburban area, Colorado

EDITOR

Eileen Armagost, WDØDGL

Please submit Articles for publication to:

eileen@armagost.net

Preferred document format: MS Word

or mail hard copy to:

Eileen Armagost, WDØDGL

6337 South Lafayette Place

Centennial, Colorado 80121-2548

DRL BOARD MEMBERS

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REPEATER LOCATIONS:

146.880 Lockheed Martin Company

146.640 Centennial Mountain

449.600 Lockheed Martin Company

145.050 Digi - Lockheed Martin Company

Repeater Identifier: WAØKBT

*The Denver Radio League is open to all licensed
amateur radio operators. Repeater usage is
limited to properly licensed hams.*

Membership dues and renewals

**~ Please make checks (\$15) payable to
Denver Radio League or DRL ~**

Remit to: Al Cooley, NØAUS

6199 South Broadway

Littleton, Colorado 80121-8016

For information, contact Al at:

303-794-6511 or on the 146.880 Repeater

DRL Membership Meeting

(Last one for 2005 !!!)

Wednesday ~ November 16, 2005

7:00 to 9:00 p.m.

Bemis Public Library

Please note:

We Must Be Out

Before or By 9:00 P.M.



Happy Thanksgiving!

From the Editor ...

Wishing each of you the happiest of holidays, a warm home, and the courage and strength to face all the changes that our world is presenting to us. My hope is that we will all be able to maintain, if not excel, in the face of rising costs and mother natures antics, with good health, family and friends.

This publication offers *Hamfests and Other Events 2006* by NØLP, an excellent *IRLP Info* by Bob Schellhorn, NØTI, a *humorous article* from Russ Lawrence, KAØULN, and a *cartoon* by Chris Krengel, KBØYRZ. In addition, you'll find the *EOSS 100th Flight invitation* and the *2006 ARRL Rocky Mountain Division Convention Registration Form*. Thank you all for providing the information and humor.

As we move toward the future, please remember that this is YOUR newsletter publication. Please take the time to submit articles of interest, learning and fun and share them with your fellow hams.

I thank you for your continued support of this editor. Thank you Tim, WBØTUB and Al, NØAUS for all that you have done to continue making it possible.

Happy Holidays one and all!!!

Eileen, WDØDGL




**Hamfests and Other Events - 2006
As of: October 6, 2005**

Hamfests

| Date | | Group/Name | Location/Time |
|-------------|---|---------------------------------|---|
| 02/12/06 | | Aurora Repeater Association | Adams County Fair Grounds |
| 04/01/06 | | LARCFest | Longmont, Boulder County Fairgrounds |
| 07/08/06 | | PPRAA | Monument, Lewis-Palmer High School / 0800 |
| 08/20/06 | | Denver Radio Club | Lakewood, Jefferson County Fair Grounds |
| 08/27/05 | X | Campfest / Mountain ARC | Golden Bell Campgrounds near Divide |
| 09/24/06 | | BARCFest | Longmont, Boulder County Fairgrounds / 0800 |
| 09/17/05 | X | Northern Colorado ARC Superfest | Loveland, 700 South Railroad Avenue |
| No plans | | RMRL | Lakewood, Jefferson County Fair Grounds |

X - means no official announcement from the sponsor so using last year's date plus one year.

Other Events

| Date | | Events/Location |
|---|---|---|
| 04/01/06 | | Arapahoe County ARES D22: Destination Imagination |
| 04/16/06 | | Easter |
| 05/--/06 | X | Arapahoe County ARES D22: Leukemia Regatta |
| 05/07/06 | X | Arapahoe County ARES22: Denver MS Walk |
| 05/14/06 | | Mother's Day |
| 05/19-21/06 | | Hamvention, Dayton, Ohio |
| 05/29/06 | | Memorial Day |
| 06/2-3/06 | | Arapahoe County ARES D22: NDMS Ops, West Slope |
| 06/9-11/06 | | ARRL Rocky Mountain Division Convention - Hamcon 2006, Estes Park Registration form included in this edition of the Repeater Rag The Editor |
|  | | |
| 06/10-12/06 | X | Arapahoe County ARES D22: Metro Wide Exercise |
| 06/18/06 | | Father's Day |
| 06/24-25/06 | | Field Day |
| 06/24-25/06 | | Arapahoe County ARES D22: Fat Tire Classic |
| 07/8-9/06 | | Arapahoe County ARES D22: MS150 Bike Tour |
| 07/23/06 | | Arapahoe County ARES D22: Leukemia Regatta (tent) |
| 08/4-6/06 | | Great Plains Super Launch, Hutchinson, Kansas |
| 08/19-20/06 | | Arapahoe County ARES D22: Rattlesnake Triathlon |
| 09/04/06 | | Labor Day |
| 09/9-11/06 | X | Arapahoe County ARES D22: MS Challenge Walk |
| 11/23/06 | | Thanksgiving |
| 12/1-2/06 | | Parade of Lights, Denver |

X - means no official announcement from the sponsor so using last year's date plus one year.

Compiled by NØLP with lots of help. Please send any updates or corrections to n0lp@arrl.net.

DRL IRLP INFO

This document is for DRL members eyes only. Oooh Secret! Just don't want this to get into the hands of any hackers.

DRL IRLP is the Denver Radio League's Internet Radio Linking Project. This document attempts to explain changes in the repeater software to accommodate the linking and user interface to the IRLP computer which is not located at the repeater site. The IRLP computer which is connected to the internet via a special card is linked to the repeater via a transceiver. This radio transmits into and receives from the repeater just like another user.

One of the requirements of being connected to the network is that repeater CW Ids, courtesy tones, beeps or bopes not be sent over the network. You are allowed to send DTMF tones, but these are filtered out before they get to the network. The DRL 449.600 repeater has been upgraded awaiting the IRLP ground station. The repeater software was installed before the first snow. We hope the software is ready with no mistakes.

Lets take an example of what should take place to make a connection. The user must first send, via DTMF tones, a 3-digit access code followed by the 4-digit node code (indicating where they want to be connected). There is no need for a * (as when putting the repeater in net mode). The first digit of the access code must be zero as this allows the cmd (command) string to pass through the repeater un-muted and disregarded by the repeater. This command string is for the IRLP ground station. If the tones were muted, the ground station would not hear them.

If the string is received ok, the ground station will send a proper command string to the repeater to put it into IRLP mode. If the ground station would have been turned off or something else wrong, nothing happens. If everything works ok, the node you requested

should announce itself in a few seconds.

When the repeater is put into IRLP mode the following changes take place:

- The CTCSS tone is ONLY sent when a carrier is received by the repeater. This is done to prevent any IDs or tones from being heard at the ground station.
- The timeout timer is increased from 2 minutes to 3 minutes.
- The hang time is increased from 3.9 seconds to 6.5 seconds. This allows the remote station to pick up so the repeater won't keep turning off between transmissions.
- There is a special courtesy tone to remind anyone locally that you are in IRLP mode. The tone will not be sent over the network.

When disconnecting from IRLP mode, the same command is sent by the user except no ID node is needed. This command is sent through the repeater just like the connect command. The ground station will send a disconnect command to the repeater to take it out of IRLP mode.

DRL repeaters don't normally require that a CTCSS tone be used to access the repeater, but when using IRLP mode, it is required. This keeps noise off the network. When using a CTCSS decoder, if you have it turned on, you will not hear the courtesy tones or the CW ID. It might be better if you have it turned off. The CTCSS is used for the benefit of the ground station, not the user.

As a suggestion, you might want to program a separate memory channel to use for IRLP with the CTCSS encoder turned on and the decoder turned off.

Bob Schellhorn, NØTI

The Accident Report

Dear Sir:

I am writing in response to your request for additional information for block number 3 or the accident reporting form. I put "poor planning" as the cause of my accident. You said in your letter that I should explain more fully and I trust the following detail will be sufficient.

I am an amateur radio operator and on the day of the accident, I was working alone on the top section of my new 80 foot tower. When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware. Rather than carry the now un-needed tools and material down by hand, I decided to lower the items down in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower.



Securing the rope at ground level, I went to the top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to insure a slow decent of the 300 pounds of tools. You will note in block number 11 of the accident reporting form, that I weigh only 155 pounds.

Due to my surprise of being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains my fractured skull and broken collarbone.

Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley. Fortunately, by this time, I had regained my presence of mind and was able to hold onto the rope in spite of my pain.

At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight in block number 11. As you might imagine, I began a rapid descent down the side of the tower.

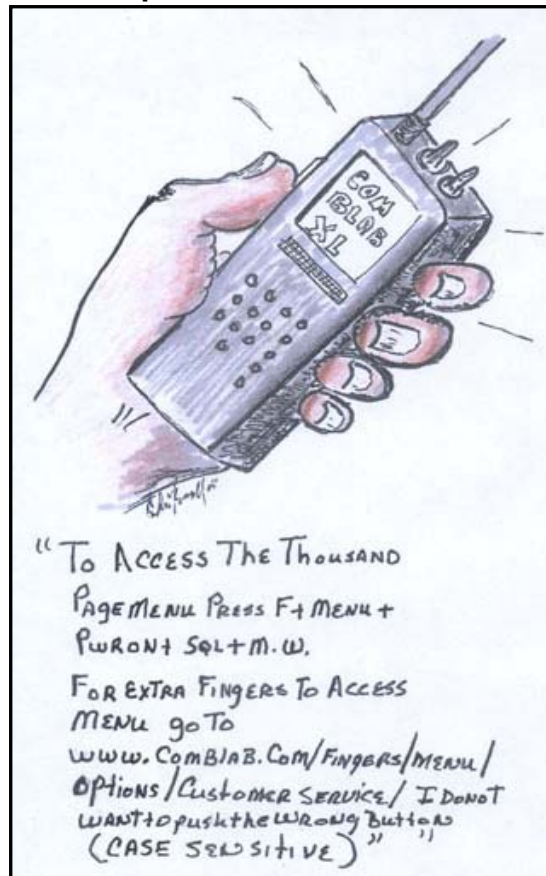
In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body. The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools and fortunately, only three vertebrae were cracked.

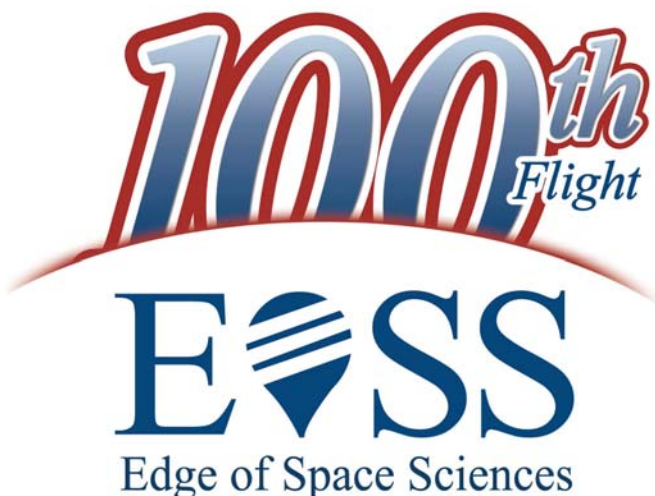
I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand and watching the empty barrel 80 feet above me ... I again lost my presence of mind. I let go of the rope.

73, Russ, KAØULN

Menu Options

By Chris Krengle, KBØYRZ





Join us as Edge of Space Sciences (EOSS) celebrates 15 years of high altitude educational balloon experiments by launching Flight #100!

EOSS is a non-profit Colorado organization consisting of scientists, amateur radio operators and educators who promote the sciences by utilizing amateur radio and high altitude balloons to conduct missions at the edge of space. Over 21,000 high school and university students have participated in exploratory and experimental balloon flights as a direct result of EOSS inspiration over the past 15 years.

This event is an opportunity to recognize the contributions of balloon pioneers from around the nation and within EOSS. Hosts for this launch, ceremony and party are the kind folks at Intrado, Inc in Longmont, CO. Here are the details:

WHAT: EOSS Flight #100. There will be a short recognition ceremony before the launch. Everyone can enjoy the launch and then move indoors. During the flight, you will be hosted in the multi-media auditorium while EOSS flight control personnel manage the flight. They will present the flight status, tracking and recovery operations and amazing video on many large media screens. Balloon pioneers from around the nation will offer comments and insights. The payload will be returned by helicopter and the wrap up party will begin. Food and drinks will be provided by our generous hosts, Intrado.

WHEN: Saturday, November 12, 2005. Rain or snow date is Sunday, November 13, 2005

| | |
|------------------------|--|
| 6:30 a.m. | Pre-flight process, student experiment staging, flight string tests, balloon inflation |
| 6:30 a.m. – 8:30 a.m | Breakfast feast starts - please RSVP |
| 7:15 a.m. - 7:30 a.m. | Recognition ceremony at launch site |
| 7:30 a.m. | EOSS 100 Launch!! |
| 7:30 a.m. – 12:00 a.m. | Flight management and recovery in mission control center |
| 12:00 p.m. - 2:00 p.m. | Wrap-up party and reception starts - please RSVP |

WHERE: Intrado Headquarters, 1601 Dry Creek Drive, South East Parking Lot, Longmont, CO 80503

Talk-in 147.225, PL 107.2, 146.58 Simplex

DINNER FRIDAY NIGHT: Gather with us at the Armadillo Restaurant for an informal “gab and eat” on Friday night, October 11 at 7:00. The location is: 700 Ken Pratt Blvd, Longmont, CO 80501-6452, (303)-651-1116. The Armadillo provides very good Mexican cuisine at a reasonable price. If you plan to attend the informal Friday night dinner, please indicate how many will be attending so we can adjust the reservations.

LODGING: For those of you wishing to stay Friday night in Longmont, the official event hotel will be the Marriott Courtyard, 1410 Dry Creek Drive, Longmont CO 80503, (303)-682-1166. \$89 per night does not include breakfast. This facility is right across the street from the launch site - a nice walk on a beautiful morning.

There is also a Days Inn nearby at 3820 Highway 119, Longmont, CO 80501. \$78 per night.

RSVP: If you think you can attend this event, please send an email to Jennifer Laverty, jlaverty@intrado.com. Advise us how many will be in your party which will help us plan for ample food and refreshments.

EVENT COST : Simply bring your intent to enjoy the flight and the hospitality offered by EOSS and our friends at Intrado.

FOR MORE INFORMATION: Contact Jim Gifford at KOLOB@ARRL.NET.
Check www.eoss.org, and select Upcoming Flights.

We hope to see you there!!!

2006 ARRL ROCKY MOUNTAIN DIVISION CONVENTION REGISTRATION FORM

“AMATEUR RADIO – FACING THE FUTURE”

June 9, 10 and 11, 2006

LOCATED IN THE BEAUTIFUL ROCKY MOUNTAINS AT

Estes Park, Colorado

ANOTHER MAJOR DIVISION CONVENTION FEATURING A LARGE VARIETY OF INTERESTS WITHIN AMATEUR RADIO

Many high profile personalities plan to attend this convention including the following:

~ FRIDAY NIGHT KEYNOTE ADDRESS SPEAKER ~

Brian Milesosky, N5ZGT, Vice Director, Rocky Mountain Division, ARRL

~ SATURDAY LADIES LUNCHEON GUEST SPEAKER ~

TBD

~ SATURDAY NIGHT BANQUET GUEST SPEAKER ~

Riley Hollingsworth, K4ZDH, FCC Special Counsel for Enforcement

~ SUNDAY MORNING ARRL BADGE BREAKFAST GUEST SPEAKER ~

Harold Kramer, WJ1B, ARRL Chief Operating Officer, & QST Publisher



ACTIVITIES AND EVENTS

➤ Additional items may be added as developed ...

- Amateur Radio Emergency Service (ARES)
- American Radio Relay League (ARRL)
- BARC Juniors
- Contesting includes a Transmitter Hunt
- Digital Modes – General
- Digital Modes for Traffic Handling
- DX
- EOSS
- Facts and Myths of RF Grounding
- Low Band Propagation (for current sunspot low)
- NVIS Antennas
- QRP
- Saturday evening Social Hour – An opportunity to meet fellow hams!
- **Saturday Midnight - Wouff Hong** (an “enlightening” adventure!)
- **VE Exams**
- What Do Receiver Specs Really Mean?

See www.hamconcolorado.org

for complete forums, speakers, and further activities.

ACCOMMODATIONS

Holiday Inn Estes Park Conference Center

101 South Saint Vrain Avenue
(Colorado Hwy. 7 at US Hwy. 36)
1-800-803-7837 or 1-970-586-2332

www.rockymountainparkinn.com

Reservations

\$82.00 + tax Single or Double Occupancy:

Request the “Special ARRL HAMCON Rate”

Place your reservations today!

Special Rates are good until 05/19/06 only!

Estes Park RV/Campground - 1-800-562-1887

www.koa.com/where/co/06113.htm

Estes Park General Information

For shopping information, things to do and see ...

1-800-443-7837 or www.estespark.us

EARLY BIRD

(prior to March 1, 2006):

\$10.00/Adult
\$ 5.00/age 17 and under
FREE Convention Logo Pin

ADVANCED

(prior to May 15, 2006):

\$12.00/Adult
\$ 6.00/age 17 and under
\$ 3.00 Convention Logo Pin

AT THE DOOR

beginning at 0900 Friday, June 09, 2006

\$15.00/Adult
\$ 7.00/age 17 and under
\$ 3.00 Convention Logo Pin (while supplies last)

PLEASE COMPLETE REGISTRATION FORM BELOW, CUT ALONG DOTTED LINE, AND REMIT TO REGISTRATION CHAIRMAN AT BOTTOM OF FORM.

Name: _____ Call Sign: _____ Tech Session Speaker? ✓one: Yes ___ No ___

Additional Attendees (w/call sign if applicable – full names are a must):

Name: _____ Call Sign: _____ Name: _____ Call Sign: _____

Name: _____ Call Sign: _____ Name: _____ Call Sign: _____

Address: _____ City: _____

State: _____ Zip Code: _____ Phone: _____ - _____ - _____ (include area code)

E-mail: _____ (for registration confirmation)

| | # Reg. | Early bird or Advanced | Total |
|--|--------|-----------------------------|--------------|
| Adults: _____ | x | \$10.00 or \$12.00 ea | = _____ |
| Youths: (17 and under <u>must</u> be accompanied by adult): _____ | x | \$5.00 or \$6.00 ea | = _____ |
| * Friday Night Keynote Address ~ Brian Milesosky, N5ZGT: <u>N/A</u> | x | Free to all | = <u>N/A</u> |
| Saturday Ladies Luncheon ~ Speaker TBD: _____ | x | \$15.00 ea | = _____ |
| * Saturday Night Banquet ~ an evening with Riley Hollingsworth, K4ZDH: _____ | x | \$32.00 ea | = _____ |
| Sunday ARRL Badge Breakfast ~ Harold Kramer, WJ1B: _____ | x | \$15.00 ea | = _____ |
| * FRIDAY NIGHT KEYNOTE ADDRESS AND SATURDAY NIGHT BANQUET EACH INCLUDE A MAJOR PRIZE DRAWING! | | | = |
| TOTAL | | | = |
| DUE | | | \$ _____ |

MAKE CHECK OR MONEY ORDER PAYABLE TO HAMCON COLORADO, INC.

REMIT TO TIM & EILEEN ARMAGOST, HAMCON 2006 REGISTRATION, 6337 SOUTH LAFAYETTE PLACE, CENTENNIAL, COLORADO 80121-2548

Visit our web site at: www.hamconcolorado.org

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