

# *NCARC*

# **TRIBANDER**



[Alinco DX-SR8T](#)

***NORTHERN COLORADO AMATEUR RADIO CLUB***

## Club Officers

President	Darren Kalmbach	KCOZIE	<a href="mailto:president@ncarc.net">president@ncarc.net</a>
Vice President	David Johntson	KD8BQN	<a href="mailto:vicepresident@ncarc.net">vicepresident@ncarc.net</a>
Secretary	Joe Hawley	KD0TYU	<a href="mailto:secretary@ncarc.net">secretary@ncarc.net</a>
Treasurer	Tim Cottam	W0TJC	<a href="mailto:treasurer@ncarc.net">treasurer@ncarc.net</a>
Trustee	Jeff Ford	K0JEF	<a href="mailto:trustee@ncarc.net">trustee@ncarc.net</a>
Technical Committee chair	John Wells	KB0NE	<a href="mailto:techchair@ncarc.net">techchair@ncarc.net</a>
Public Affairs Officer	Tony Kalmbach	KD0WDX	<a href="mailto:pao@ncarc.net">pao@ncarc.net</a>
Member at Large	Willie Williams	W5WIW	<a href="mailto:memberatlarge@ncarc.net">memberatlarge@ncarc.net</a>
Former President	Bob Schmid	WA9FBO	<a href="mailto:pastpresident@ncarc.net">pastpresident@ncarc.net</a>

## Local Repeaters

Frequency	Tone	Call Sign	Operated By	Services
144.390 Simplex APRS Digipeaters / No Tone		WØUPS	NCARC	GEN. BACKUP
		WØQEY	CSU	?
		WØLRA	LRA	?
145.115-	100.0 HZ	WØUPS	NCARC	BATTERY / GEN. BACKUP AUTOPATCH
146.625-	100.0 Hz	WØUPS	NCARC	NONE
146.850-	100.0 Hz	WØUPS	NCARC	NONE
147.000+	100.0 Hz	KCØKWD	WARS	CONTINUOUSLY LINKED IRLP node 3839 ECHOLINK
147.195+	100.0 Hz	WØLRA	LRA	BATTERY BACKUP AUTOPATCH
147.270+	100.0 Hz	NØENO	LARC	AUTOPATCH
147.360+	100.0 Hz	WØQEY	CSU	NONE
224.520-	100.0 Hz	WØUPS	NCARC	GEN. BACKUP
224.840-	100.0 Hz	WØUPS	NCARC	GEN. BACKUP / LINKED 145.205
447.275-	100.0 Hz	WØUPS	NCARC	GEN. BACKUP AUTOPATCH
448.800-	88.5 Hz	WØENO	LARC	NONE
448.025-	100.0 Hz	WØUPS	NCARC	NONE
448.475-	100.0 Hz	KCØKWD	WARS	CONTINUOUSLY LINKED IRLP node 3839 ECHOLINK
449.575-	100.0 Hz	WØLRA	LRA	BATTERY BACKUP
449.725-	127.3 Hz	KØOJ	KØOJ	AUTOPATCH
449.850-	100.0 Hz	WØQEY	CSU	NONE
927.825-	100.0 Hz	ABØSF	ABØSF	NONE
927.875-	DPL 114	NØZUQ	NØZUQ	NONE
927.950-	100.0 Hz	K1TJ	K1TJ	GEN. BACKUP
1283.550-	100.0 Hz	K1TJ	K1TJ	NONE
Frequency	Tone	Call sign	Operated By	Services

# NCARC MEETING

April 18, 2015

AT THE

## GOLDEN CORRAL

1360 Sculptor Dr,

Loveland, CO

BREAKFAST – 0800

MEETING - 0900



### [Alinco DX-SR8T](#)

#### Features of DX-SR8T/E

- **Coverage of All short-wave and HF amateur bands (DX-SR8T North American /DX-SR8E European and other regions)**  
Covers the 160m to 10m amateur bands including 5.3MHz (T-model only) in SSB, CW, AM and FM modes. Output power is 100W SSB/CW and FM, 40W in AM with low and super-low power settings for QRP operation. In addition, the general coverage receiver covers 135KHz to 30MHz in all modes.
- **Detachable front control panel**  
Completely detachable front control panel with large LCD display lets you install the radio with greater flexibility whether in your car, boat or your shack. (Optional EDS-17 cable required)
- **Direct DATA entry via the key pads**  
While the main dial tunes at the default 10Hz/resolution (adjustable in set mode), the numerical key pads can be used for fast direct frequency input, band selection and more.
- **Fight QRM with these STANDARD features**  
Reject unwanted signals with the IF shift. Choose a narrow filter, a noise-blanker or use RIT/TXIT to stay out of QRM.
- **Emphasis on CW Operation**  
An electronic keyer unit is standard. You can receive CW using either upper or lower side of the carrier frequency. Choice of side tone pitch, FULL (QSK), Semi or Auto break-in, split, narrow filter, AGC and RF gain.

- **World-class transmit audio quality**  
A dynamic microphone (T/E models) and a speech compressor come standard for sharp, clear and powerful transmitting audio.
- **Enhanced scan modes**  
A variety of scan modes are available including Priority, Search, Busy, Timed, Memory and Programmed search. Timed scan setting does not require squelch-mute so you are able to monitor data-modes and broadcasts simultaneously with memory search scan.
- **Additional convenient features include**  
RF Attenuator and Pre-amplifier selectable in 4 steps, / 3 TX power output levels with a Super-Low setting (QRP 0.1W~2W variable) / Dual VFO / 600ch memories in 3 banks / Connections for Auto-antenna tuner and Liner amplifier ALC output / Fully independent AF level, squelch, RIT and IF shift knobs / Dial lock and key lock / TX-RX lamp / Alphanumeric display / Auto-power-off / CTCSS encode for 10m FM repeater accesses / Microphone, Headphone and External speaker jacks on the front panel / Large, temperature-controlled internal cooling fan with anti-overheat output power limiter/ High-SWR protection?and more!

[Standard accessories]

- EMS-64 (SR8E/SR8T: Dynamic)
- DC cable
- Microphone hanger EBC-7

[Optional accessories]

- EDX-2 automatic long-wire antenna tuner
- EDS-17 Front control remote kit (5m cable, front panel bracket, unit cover and hardware)
- EMS-14 Desktop microphone
- DM330/340MV series DC power supplies

## Freeware Downloads

Please click [here](#) for details

## Specifications

<b>General DX-SR8 ALL MODELS</b>	
<b>Operating mode</b>	<b>J3E (USB, LSB), A3E (AM), A1A (CW), F3E (FM)</b>
<b>Antenna impedance</b>	<b>50ohm unbalanced</b>
<b>Frequency stability</b>	<b>+/-1ppm</b>
<b>Power requirement</b>	<b>13.8V DC +/-15% (11.7 to 15.8V DC)</b>
<b>Ground method</b>	<b>Negative ground</b>
<b>Current drain</b>	<b>Receiver: 1.0A(max.) 0.7A(Squelched)</b>

	<b>Transmit: 20A</b>
<b>Operating temperature</b>	<b>-10digC to 60digC (+14digF to +140digF)</b>
<b>Dimentions</b>	<b>240(w) x 94(h) x 255(d)mm (Projections not included) (9.45"(w) x 3.7"(h) x 10"(d) 240(w) x 100(h) x 293(d)mm (9.45"(w) x 3.94"(h) x 11.54"(d)</b>
<b>Weight</b>	<b>Approx. 4.1kg (144.6oz)</b>

## **Transmitter**

<b>Power Output</b>	<b>SSB, CW, FM: 100W(Hi) Approx. 10W (Low) Approx. 1W (S-Low) AM: 40W(Hi) Approx. 4W (Low) Approx. 0.4W (S-Low)</b>
<b>Modulation system</b>	<b>SSB: Balanced modulation AM: Low power modulation FM: Reactance modulation</b>
<b>Spurious emission</b>	<b>Less than -50dB (Less than -45dB in 30m band)</b>
<b>Carrier suppression</b>	<b>More than 40dB</b>
<b>Unwanted sideband</b>	<b>More than 50dB(1KHz)</b>
<b>Maximum FM deviation</b>	<b>+/-2.5KHz</b>

## **Receiver**

<b>Receive circuitry</b>	<b>Double conversion superheterodyne</b>
<b>Sensitivity</b>	<b>SSB: (0.15 to 1.8MHz) 0dBu(1uV) CW: (1.8 to 30MHz) -12dBu(0.25uV) AM: (0.15 to 1.8MHz) +20dBu(10uV) AM: (1.8 to 30MHz) +6dBu(2uV) FM: (28 to 30MHz) -6dBu(0.5uV)</b>
<b>Intermediate frequency</b>	<b>1st 71.75MHz, 2nd 455KHz</b>
<b>Selectivity</b>	<b>SSB, CW, AM(narrow): 2.4KHz/-6dB 4.5KHz/-60dB AM, FM: 6KHz/-6dB 18KHz/-60dB -6dB: 6KHz or more -60dB: 16KHz or less (NFM)</b>
<b>Spurious and image rejection ratio</b>	<b>More than 70dB</b>
<b>Audio output power</b>	<b>More than 2.0W(8ohm 10%THD)</b>
<b>RIT variable range</b>	<b>+/-1.2KHz</b>

		<b>DX-SR8T (USA/Canadian Amateur)</b>	<b>DX-SR8E (European and other regions Amateur)</b>
<b>Microphone impedance</b>		<b>300ohm</b>	
<b>Transmit Frequency coverage</b>	<b>160m band (1.8M)</b>	<b>1.80000 - 1.99999MHz</b>	<b>1.80000 - 1.99999MHz</b>
	<b>80m band (3.5M)</b>	<b>3.50000 - 3.99999MHz</b>	<b>3.40000 - 3.99999MHz</b>
	<b>*60m band (5.3M)</b>	<b>5.33050MHz 5.34650MHz 5.36650MHz 5.37150MHz 5.40350MHz</b>	<b>-</b>
	<b>40m band (7M)</b>	<b>7.00000 - 7.29999MHz</b>	<b>6.90000 - 7.49999MHz</b>
	<b>30m band (10M)</b>	<b>10.10000 - 10.14999MHz</b>	<b>9.90000 - 10.49999MHz</b>
	<b>20m band (14M)</b>	<b>14.00000 - 14.34999MHz</b>	<b>13.90000 - 14.49999MHz</b>
	<b>17m band (18M)</b>	<b>18.06800 - 18.16799MHz</b>	<b>17.90000 - 18.49999MHz</b>
	<b>15m band (21M)</b>	<b>21.00000 - 21.44999MHz</b>	<b>20.90000 - 21.49999MHz</b>
	<b>12m band (24M)</b>	<b>24.89000 - 24.98999MHz</b>	<b>24.40000 - 25.09999MHz</b>
	<b>10m band (28M)</b>	<b>28.00000 - 29.69999MHz</b>	<b>28.00000 - 29.99999MHz</b>

# NEWS

Amateur Radio Parity Act of 2015 Introduced in Congress  
(From arrl.org)

03/05/2015

"The Amateur Radio Parity Act of 2015" – H.R.1301 – has been introduced in the US House of Representatives. The measure would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land use restrictions. US Rep Adam Kinzinger (R-IL) introduced the bill March 4 with 12 original co-sponsors from both sides of the aisle – seven Republicans and five Democrats. Kinzinger also sponsored "The Amateur Radio Parity Act of 2014, which died at the end of the 113th Congress. H.R. 1301 is an essentially identical piece of legislation.

"The introduction of H.R. 1301 with so many original co-sponsors, so early in this session of Congress, is very encouraging," said ARRL President Kay Craigie, N3KN. "Several additional members of Congress already have agreed to be co-sponsors. This bill has momentum, but introduction is only the first step. Many of the next steps will be taken as ARRL members contact their US Representatives urging co-sponsorship and thanking them as they sign on to the bill."

If Congress approves the legislation, and it is signed by the president, H.R. 1301 would require the FCC to amend its Part 97 Amateur Service rules to apply the three-part test of the PRB-1 federal pre-emption policy to include homeowners' association regulations and deed restrictions, often referred to as "covenants, conditions, and restrictions" (CC&Rs). At present, PRB-1 only applies to state and local zoning laws and ordinances. The FCC has been reluctant to extend the same legal protections to include such private land-use agreements without direction from Congress.

H.R. 1301 has been referred to the House Energy and Commerce Committee. Rep Greg Walden, W7EQI (R-OR), chairs that panel's Communications and Technology Subcommittee, which will consider the measure. The League had worked with Walden on the 2014 bill during the 113th Congress. Among H.R. 1301 initial co-sponsors is Rep Joe Courtney (D-CT), who attended the ARRL National Centennial Convention last summer to speak with League officials and those attending the event about the earlier bill.

Craigie encouraged ARRL members to urge their US House members to sign on to the bill as a co-sponsor. The ARRL has an H.R. 1301 resources page on its website. If the House member is already a co-sponsor, call the member's local office or send an e-mail via the member's official website to express their thanks. She called on League members to encourage other hams to do the same, and to be sure to refer to the bill by its number, H.R. 1301.

"Remember what those pile-ups on the W1AW portable stations sounded like last year?" Craigie said. "Let's be that avid in calling for

even greater support in Congress for this essential legislation."

Rookie Roundup - April 19th

Rookie Roundup is scheduled 3 times per year. The 2015 schedule is April 19th - SSB; August 16th - RTTY; December 20th - CW. Time for all three events is 1800 to 2359 UTC.

Rookie Roundup is a contest aimed at Amateurs licensed for three years or less. Rookies can contact anybody, while "Old Timers" make contact with only Rookies. Mentoring is a big part of this event!

For more info go to <http://www.arrl.org/rookie-roundup>

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[wl2kemcomm] Lithium battery dangers -- and the ONLY way to extinguish a Lithium battery fire

Larry Randall -- WA5BEN

As the battery SME (Subject Matter Expert) on the Corporate Regulatory Compliance team at Texas Instruments Incorporated, I was "intellectually aware" of the significant dangers of Lithium based batteries. I just received a "personal reminder" that should be passed along. My wife had stopped using her music player, and put it in a little-used drawer. I opened that drawer a couple of days ago, and found that the LiOn battery pack was swelled to at least 8 times its original thickness (was ~ 1/8", now closer to 1"). While the player may have been left on (unlikely), the likely cause is battery failure from an internal short that caused the battery to heat up. This is the sequence:

1. Initiating event: over-discharge or internal short
2. Both pressure and temperature increase
3. Thermal runaway
4. Gas emission and/or fire and explosion (which releases flammable liquid in LiOn and molten Lithium in primary cells)

We were quite lucky that it did not explode and catch fire.

...which brings me to a critical piece of information that is not known to 90%+ of the population:

\*How does one extinguish a Lithium battery fire?\*

First and foremost, NEVER, EVER put water on any Lithium fire !!!

.....Water may ADD FUEL, and make the fire LARGER.\*

There are two ways to extinguish Lithium:

1. DRY sand (most recommended method)
2. Dry chemical extinguisher -- MUST be rated "ABC"

Events that may cause battery failure and destructive runaway include:

1. Dropping the containing equipment, or the cell or battery pack (collection of cells)
2. Puncturing a cell
3. Overheating
4. Improper storage

For the person who has small capacity batteries, small precautions are recommended. For persons, businesses, agencies, and NGO that maintain multiple relatively high capacity LiOn and large capacity Lithium primary batteries, specific precautions are recommended -- including a consultation with the local fire department to make them aware of the presence of quantities of these batteries.

\* LiOn and Lithium batteries and containing equipment should be stored with NO COMBUSTIBLE MATERIALS.

\* Multiple units (e.g., spare radio batteries) should be stored in a METAL case or locker that would contain any fire.

\* Because a fire in one cell/pack will cause fire in any cell/pack in close proximity, good practice would provide two separated locations.

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Regards,

\*/Larry Randall -- WA5BEN/\*

Contractor and Consultant

Instructional Designer, Business & Technical Writer, Process Improver,

Documentation Expert

"A Writer who can also Engineer -- or an Engineer who can Write"

(Thanks to W5BI for passing this along)

\*I found the following at

[http://batteryuniversity.com/learn/article/safety\\_concerns\\_with\\_li\\_ion](http://batteryuniversity.com/learn/article/safety_concerns_with_li_ion)

: "If the fire occurs in an airplane, the FAA instructs flight attendants not to use fire extinguishers but the use of water or pop soda. Water cools the adjacent material and prevents the fire from spreading. Many research laboratories and factories also use water to put out battery fires. Allow good ventilation while the battery burns itself out. Li-ion contains no lithium metal and does not react with water (lithium metal batteries requires different extinguishing methods)." You'll need to identify the batteries you're using to determine the correct extinguishing agent.

==== Upcoming Hamfests, Tailgates and Conventions =====

Apr 18	Cloud Peak Radio and Electronics Group Swapfest (Sheridan, WY)
Apr 25	Albuquerque Spring Tailgate Swapfest (Albuquerque, NM)
Jun 6	Montrose ARC Tailgate Party (Delta, CO)
July 23-26	Central States VHF Conference (Denver, CO)
Jul 31-Aug 2	2015 ARRL Rocky Mountain Division Convention (Bryce Canyon, UT)
Aug 7-9	New Mexico ARRL State Convention / Duke City Hamfest (Albuquerque, NM)
Aug 16	Denver Radio Club Hamfest (Golden, CO)

Links to websites belonging to the above events are found on the Rocky Mountain Division site: [www.RockyMountainDivision.org](http://www.RockyMountainDivision.org)

If you're organizing a Hamfest, convention, or tailgate we encourage you to apply for ARRL-sanctioning. Sanctioning provides many benefits (including your event being listed above), and details can be found at

<http://www.arrl.org/hamfest-convention-application>

==== Upcoming On-Air Activities =====

In addition to chewing the rag with fellow hams, here are some additional on-air activities which await you on the airwaves.

Upcoming special event stations:

<http://www.arrl.org/special-event-stations>

Upcoming contests: <http://www.arrl.org/contest-calendar>  
Upcoming state QSO parties: <http://qsoparty.eqth.net> Operating awards:  
<http://www.arrl.org/awards>

===== Final Note... =====

Please touch base with your Section Manager if he can be of assistance to you:

Jack Ciaccia WMØG (Colorado):

<http://www.arrl.org/Groups/view/colorado>

Bill Kauffman W5YEJ (New Mexico):

<http://www.arrl.org/Groups/view/new-mexico>

Mel Parkes NM7P (Utah): <http://www.arrl.org/Groups/view/utah>

Garth Crowe WY7GC (Wyoming): <http://www.arrl.org/Groups/view/wyoming>

Vice Director Dwayne Allen and I continue to welcome your concerns, questions and ideas regarding ARRL policies. We are grateful for your membership within ARRL, and thank you for a memorable Centennial year. We look forward to working you on the air.

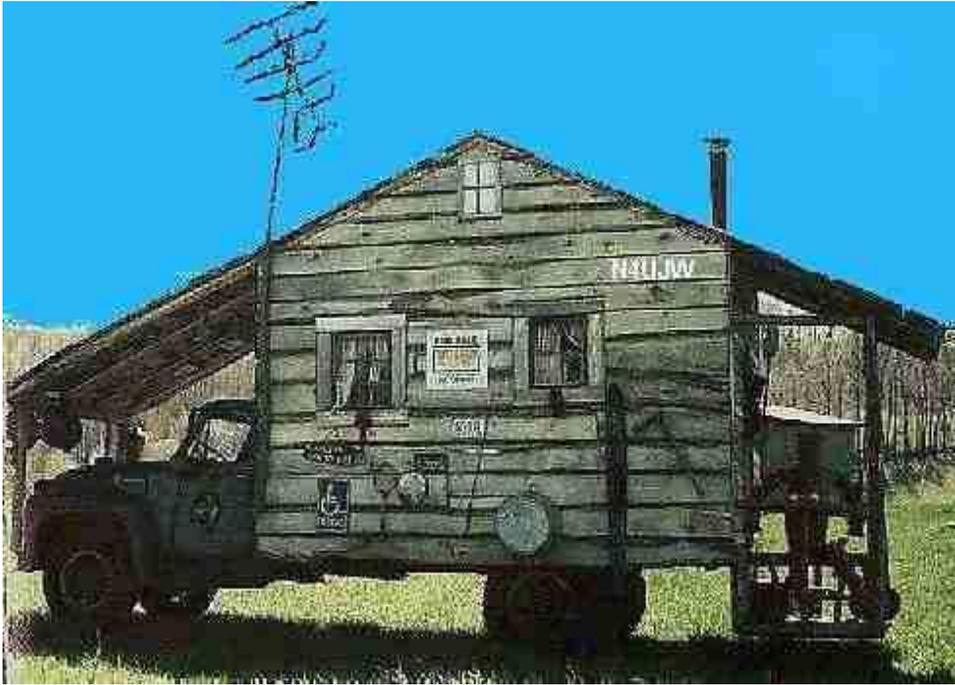
73,

Brian Milesosky N5ZGT, Rocky Mountain Division Director Dwayne Allen WY7FD,  
Rocky Mountain Division Vice-Director Division website:

[www.RockyMountainDivision.org](http://www.RockyMountainDivision.org)

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ARRL Rocky Mountain Division  
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# Jokes



**The new Mobile Shack ready for field day...complete with all the extras!  
Take a look at my new 2 meter beam...I shore are proud of it!**