



Loveland Repeater Association Newsletter

The official organ of the Loveland Repeater Association--a non-profit organization supporting all aspects of Amateur Radio in the Loveland area.

LRA Officers	
President	Dennis "Duff" Dyer, N9KKH, 593-9984, ddyer@lvld.hp.com
Vice-President	Ted Cline, N0RQV, 593-9303, ted_cline@hp.com
Secretary/Treasurer	Rick Kile, WB7THT, 962-9179,wb7tht@aol.com
Editor	Rick Kile, WB7THT, 962-9179,wb7tht@aol.com
FM Repeaters	
2 Meters	147.795/147.195 MHz (100 Hz Sub tone; 1* on, 0* off)
440	449.575/444.575 MHz (100 Hz Subtone; 1* on, 0* off)
Packet Node W0KKT/W6PQS	144.91 MHz
Interference Coordinator	Ted Cline, N0RQV, ted_cline@hp.com 593-9303
General Repeater Maintenance	Dennis "Duff" Dyer, N9KKH 593-9984, ddyer@lvld.hp.com

President's Corner

From Dennis "Duff" Dyer, N9KKH

This is my last newsletter as president and I just want to say I had a great 3 years. I would like to thank everyone for their support. I would like to wish Duff, Ted, and Rick the best of luck and I hope everyone will support them as well.

We will be showing another video at the Dec meeting. The video is about Hams in Space, the shuttle astronauts, and SAREX. I'm looking forward to seeing everyone at the meeting.

I would like to wish everyone a very happy and safe holiday season.

73 for now, Tom NØMWY

From our Secretary/Treasurer for November 1997

From Rick Kile, WB7THT

We had the following expenditures:

Newsletter	\$ 45.80
Electric	\$ 14.77
Phone	\$ 22.59
Stamps	\$ 6.40
Total	\$ 89.56

Our October bank balance was: \$1086.90. This includes \$80.00 which has been donated to the 440 Repeater Fund. Current membership is 113, including 26 family members, and 87 paid up members.

December 97 Meeting Report

From Rick Kile, WB7THT

The meeting was called to order by President Tom Levundusky, N0MWY. There were 25 members present. Following introductions, the treasurer's report was given by Jim Plumb, N0GTW. Dennis "Duff" Dyer, N9KKH gave a report on the condition of the Repeaters. The President's report was given by Tom, followed by a report on the Loveland Emergency Operations Center (EOC) from Duff.

After club business had been completed, two of our junior members gave a show and tell on the 440 beam and 2M ground plane antennas they had built. Two videos were shown, the first one on the recent amateur rocketry and the recent LDRS (Large and Dangerous Rocket Ships) XVI held near Hartsel, CO in August. The second video came to us from the ARRL, and is used at each club sponsored ham licensing class to introduce potential new hams to the many aspects of our hobby.

The 50/50 drawing was won by Leroy Sutter, WA4HMP.

Next Meeting

The next LRA meeting is scheduled for Saturday, 6 December 1997, at the Wayside Inn in Berthoud, CO. A buffet breakfast is served at 8:00AM and includes scrambled eggs, bacon, potatoes, biscuits and sausage gravy, french toast, and coffee for \$5.00. The business meeting starts at 9:00 AM.

Membership Renewal

From Rick Kile, WB7THT

It's that time again. The annual membership drive is underway. I have included the membership renewal form at the end of the newsletter, and will continue to do so for the next three months. Our membership took a hit last year. On one hand that's good...I don't have to print, fold, label and stamp as many newsletters each month. But in the long run it's bad...fewer members means less support for the Loveland repeater, and club activities. Please take a few minutes to fill out your membership renewal form and send it in, or bring it to the next club meeting. If you know other hams in the area who are not currently members of the LRA, ask them to give me call so we can sign them up to!

Flight Profile for the EOSS-32 Edge of Space Sciences High Altitude Balloon Flight From Ted Cline, N0RQV

The EOSS-32 flight was postponed from November 15 to December 6. This was due to a need for additional testing of the payload by UCCS and the EOSS Shuttle.

LAUNCH DATE: Decemember 6th, 1997

LAUNCH TIME: 15:00 UTC = 08:00 MST

LAUNCH SITE: Pikes Peak Radio Control Club Airport located east of Falcon Colorado on US 24 (9 or 10 miles east of Colorado Springs on US 24). 4 miles east of Falcon take Judge Orr road east. Follow this road 4.2 miles to Pikes Peak Radio Control Club Airport. Use the simplex frequency at the launch site for talk-in.

COORDINATES:

38 deg 57' 17.65" North Latitude

104deg 30' 04.43" West Longitude

EXPECTED TRACK: Between 45 degrees and 145 degrees azimuth.

FLIGHT EXPERIMENT: Gas Capture Experiment and In flight Ozone Experiment

PROJECT INTEGRATOR: University of Colorado at Colorado Springs (UCCS)

FREQUENCIES:

Preflight Foxhunter Net (8:00PM the preceding night):

147.225 MHz Colorado Repeater Association

Launch Site:

Simplex 146.550 MHz

Telemetry:

144.340 MHz FM (1 Watt output) - The Packet telemetry stream is in AX.25 format at 1200 baud and is readable in plain English for the most part. Included in each telemetry frame is an APRS position string (APRS users see note on WWW page). Every few minutes a CW ID is transmitted on this frequency. Please turn off your beacon when listening.

APRS Dedicated Payload:

Input 145.790 MHz, Output 145.790 MHz

ATV (EOSS Shuttle Video):

426.250 MHz AM (1 Watt output) - NTSC video

Foxhunters:

448.450 MHz Pikes Peak FM Association Repeater, 146.58 MHz Simplex

Field Frequency HF Net:

7.235 MHz - no net control set as of this writing

Who Can Hear It:

Almost all our transmitters are on VHF or above frequencies. Therefore, you need to be line of site to the payload to hear/see it. Since the payload rises to an altitude of over 90,000 feet on most missions, reception is usually possible for folks in most of Kansas, most of Nebraska, most of Wyoming, extreme south eastern Idaho, eastern Utah, north eastern Arizona, most of New Mexico, northern Texas, and western Oklahoma. Do not be discouraged by the apparent low power of our signals. I usually monitor the Beacon with an HT from the ground station throughout the flight. The signal is strong even at 130 miles and I only lose it when the balloon descends below my horizon. See the EOSS WWW site for more details at:

<http://members.iex.net/~rickvg/eoss.htm>

To subscribe or unsubscribe from the EOSS mailing list, email mgriffin@centosystems.com from the email account you wish to use. Marty Griffin will execute your wish. Pictures from the EOSS-30 on-board video, including the spectacular burst sequence can be found at: <http://members.aol.com/n0rqv>

Colorado Rocketeering From Ted Cline, N0RQV

Here's what little I know about Colorado + model rockets. First, there is a northern Colorado rocket group that launches in Walden. Lee Reep (home 223-3219, lee_reep@hp.com) emails a newsletter. Launches have been on the 2nd Saturday of the month. Secondly, Ed Krohne (ejk@edsr.com) is a contact for Tripoli Colorado with their big national 4-day LDRS (Large and Dangerous Rocket Ships) launch back on August 6-10, 1997 in Hartsel (was impressive!). The fancy WWW page still lives: <http://home.netway.net/LDRS>.

FCC Issues RF Safety Supplement B To OET Bulletin 65 From the ARRL Letter

Hams now have basic guidelines and tools to evaluate their stations for compliance with the FCC's RF exposure guidelines that start phasing in January 1, 1998. The FCC's Office of Engineering and Technology issued the long-anticipated Amateur Radio Supplement B to its OET Bulletin 65 on November 18. The FCC worked closely with the Amateur Radio community to develop the new supplement. Several ARRL Headquarters staff members and Technical Advisors reviewed preliminary drafts of the supplement. ARRL Lab Supervisor Ed Hare, W1RFL, has been the League's point man for RF safety and exposure issues.

"It has been my pleasure to work with the FCC staff and the amateur community in finalizing Supplement B", Hare said. "All who have been part of this process deserve the thanks of the entire amateur community."

Supplement B, entitled "Additional Information for Amateur Radio Stations", contains detailed information specific to ham radio stations. It is designed to be used in conjunction with the FCC's OET Bulletin 65 (Version 97-01), Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. The revised Bulletin 65 was issued earlier this year. Supplement B covers definitions of RF radiation and discusses the FCC exposure guidelines and their applications, methods of predicting human exposure, estimating compliance distances,

and controlling exposure to RF fields. The supplement runs approximately 70 pages. Among its noteworthy highlights are numerous easy-to-use tables based on various frequencies, power levels and antenna configurations to help hams determine whether their stations comply with the FCC's published RF exposure guidelines. Most tables show compliance distance--the distance that an antenna needs to be located from areas of exposure to be in compliance. (For a closer look, see "FCC RF-Exposure Regulations--the Station Evaluation", by Ed Hare, W1RFI, which will appear in the January issue of QST.)

The new RF exposure rules go into effect January 1, 1998 for all new stations and for those filing a Form 610 with the FCC after that date. Existing stations have until September 1, 2000 to comply with the new rules. But, existing stations making changes that could affect RF exposure from their station--such as increasing power or relocating antennas--must evaluate that change if done after January 1, 1998.

As first announced, the FCC set a power threshold of 50 W to trigger the need to do a station evaluation. In late August, the FCC revised the power level thresholds to trigger a routine Amateur Radio station RF exposure evaluation. Those changes were welcome news for most hams. The newest guidelines raised its original 50-W PEP threshold on all bands except 10 meters through 2 meters, where it remains at 50 W PEP. The FCC went along in part with an ARRL request and established a sliding scale for threshold levels dependent upon frequency. The revised thresholds (all PEP) are 500 W for 160 through 40 meters, 425 W on 30 meters (the maximum legal

power is 200 W), 225 W on 20 meters, 125 W on 17 meters, 100 W on 15 meters, 75 W on 12 meters and 50 W on 10 meters. The threshold for all VHF bands is 50 W. On UHF, the threshold level is 70 W on 70 cm, 150 W on 33 cm, 200 W on 23 cm, and 250 W on 13 cm and higher frequencies.

The threshold for amateur repeaters is 500 W effective radiated power (ERP) if the repeater antenna is located on a building or is less than 10 meters above ground. Stations operating at or below these respective power levels are categorically excluded from having to conduct a routine RF radiation evaluation. Mobile and portable (hand-held) devices using push-to-talk operation generally are also exempt from evaluation. But, all stations--regardless of power level--still must comply with the RF exposure limits that become effective New Year's Day. OET Bulletin 65 and the new Supplement B are available on the internet at:

<http://www.fcc.gov/oet/info/documents/bulletins/#65>

<http://www.fcc.gov/oet/info/documents/bulletins/#65/b>

Copies are available from International Transcription Service Inc, 1231 20th St NW, Washington, DC 20036; tel 202-857-3800; fax 202-857-3805.

Upcoming Swapfest Information

January 10, 1998: Northern Colorado ARC, Loveland, CO

Contact: Michael Robinson, N7MR

2236 Silver Trails Dr., Fort Collins, CO 80526

(970) 282-1167

LOVELAND REPEATER ASSOCIATION MEMBERSHIP APPLICATION

NAME		CALL	
ADDRESS			
CITY		STATE	ZIP
PHONE	LICENSE CLASS	UNDER 18 Y N	ARRL MEMBER Y N
PACKET ADDRESS		E-MAIL ADDRESS	

DUES: Family Membership \$20.00 *NEW FAMILY MEMBERS ARE*

Under 18 \$ 5.00 *PRO-RATED AT \$1.75/MONTH*

*****USE BACK OF FORM FOR ADDITIONAL FAMILY MEMBERS*****

INCLUDES 2 *FREE* MACROS

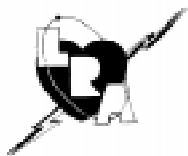
Contact: Duff, N9KKH 593-9984

MAKE CHECKS PAYABLE TO **LRA**

Loveland Repeater Association
P.O. Box 1733
Loveland, CO 80539-1733

TOTAL ENCLOSED DUES

Loveland Repeater Association
P.O. Box 1733
Loveland, CO
80539-1733



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Since 1978