



THE OHM TOWN NEWS

The Voice of the Bridgerland Amateur Radio Club

NOVEMBER 1998

<http://barc.everton.com>

OCTOBER BALLOON FLIGHT A SUCCESS!!

by Dan Anderson KA0EOF.

photos by Cristi Anderson KB7RAV

Cornish, UT (BARC-OTN). On October 15th, 1998 at 12:30 p.m. 30 enthusiastic hams and family members participated in the launch of a ham radio meteorological rubber balloon flight (BARC-1). The payload consisted of a Campbell Scientific CR10X Datalogger (controller), 300 mW Alinco DJ-C1T credit card sized 2m radio, DTMF controller circuit designed by Brian Ulrich (N7QAR) and redundant cut down mechanisms consisting of Joe Corbett's (N7NJR) handy bathroom timer and a timer circuit on board controlled by the Datalogger. A yellow parachute that was sewn up from the early days of the BARC balloon flights ensured that the payload would float safely to the ground and survive for future flights.



"Fill 'er up Ted"

Since the payload was so light (a little over 2 pounds) and since Ted McArthur, KB7PAB had lots of gas (oops I mean filled up the balloon with lots of gas) the balloon rose at roughly 700 feet per minute! We actually lost our very first balloon (but not the payload) at 12:00 p.m. due to a problem with launching, a very full balloon (which causes lift) and the use of a lighter weight fishing line. But thanks to Harl Goodsell (W7LTH) and Stan Wellard (KJ7WV) we had several extra balloons for backup.

On board the CR10X datalogger was making a thermocou-

ple measurement every 60 seconds and transmitting that information along with station ID via Morse code on 146.460 Mhz 2m FM. Message formats and data transmitted are listed below. At roughly 13 minutes into the flight it was decided to give the DTMF tone to cut down the payload. Since the balloon was rising very quickly and getting caught in an easterly airflow it would soon be over the mountains. At that time the temperature transmitted was 4°F. Assuming a *dry* adiabatic lapse rate of 5.5°F/1000 feet, with the air temperature at take-off as 54°F we can approximate the altitude the balloon rose to, based on this temperature difference. We are estimating that the balloon rose to a little over 9000 feet ($54 - 4 = 50 / 5.5 / 1000 = 9090'$) before being released based on the temperature curve (see graph). Earlier flights in 1991 resulted in flights to near 60,000 feet!

Once the payload was released the radio direction finding chase was on and a flurry of activity was heard on 146.720,



146.800 and 146.46 Mhz. Conversations such as "I think its a goner, No No I think its in Idaho somewhere and WHERE ARE YOU ???!" could be heard along with the faint 300 mW cw beacon.

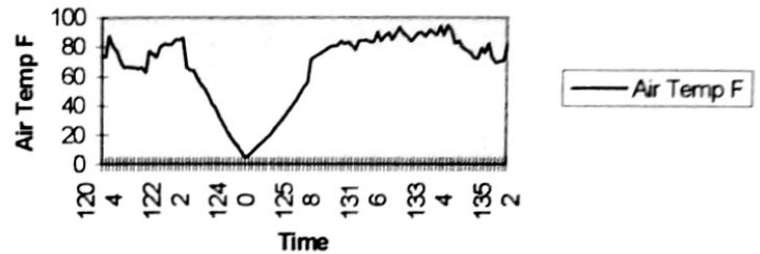
Armed with direction finding gear or using the body shield method to track the transmitter, kids, family members and hams were on the hunt. At roughly an hour and half into the hunt the group consensus was that the payload was very near Little Mountain. After driving several miles around Little Mountain everyone climbed out of their vehicle and headed into the fields (Travis couldn't wait and ran out in front of the moving vehicles). Using the body shield method for transmitter location and the use of binoculars resulted in a visual sighting by the ground crew. Those that were out in the field knew they were close since the signal strength indicators on their HTs were full scale. Brian Ulrich and family had the honor



of running a third of the way up Little Mountain (still out of breath Brian?) and recovering the payload at exactly 2:30 p.m. or 2 hours after launch of BARC-1. Celebration and announcement over .72 resulted in congratulations all around.

Thanks to all who participated and supported this flight. A special thanks goes to Ted McArthur (KB7PAB) and his boss for the donation of the helium gas (thanks for being a good sport Ted) and to Joe Corbett (N7NJR) for heading up this exciting BARC project. Future flights planned may consist of Amateur Television and smaller lightweight controllers.

Cornish, UT Balloon Flight (10 OCT 1998)



The Secretary's Corner

By Beanie Lofthouse, KJ7LQ

Our monthly meeting was held the 8th at the Hyde Park City Building.

Mark, AA1HR was on hand to update us on the planning of Jamboree On The Air. See elsewhere in this newsletter about the update of the actual event, it was awesome! We have a terrific group of hams in our club!

Joe Corbett, N7NJR filled us in on the balloon launch, that too was quite a fun time for everyone that was able to be involved.

We had another successful test session on the 10th at Campbell Scientific including several upgrades. Congratulations to all! We have another test session planned for December 12, same place, same time, plenty of time for those interested in upgrading or getting started! We will remind you about this several times before it happens.

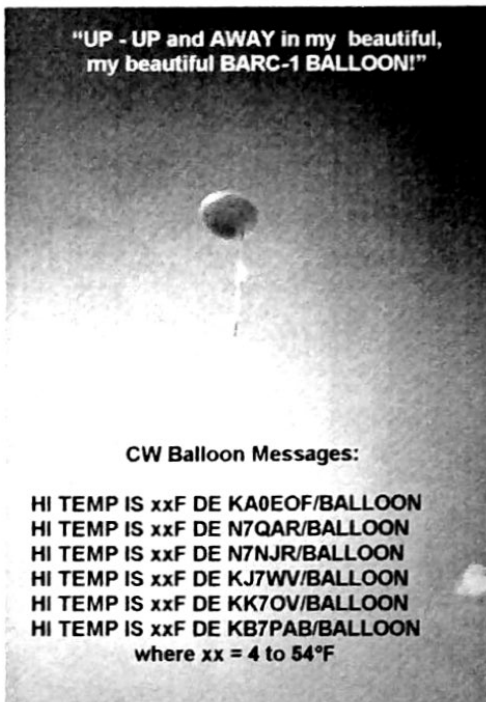
We had a lot of discussion and comments about our proposed by-law changes. The vote for changing our Vice President position to become president-elect, was defeated 13 for, 18 against. The vote for unifying the dues structure passes with 29 for, with 2 people choosing not to vote on that issue.

The Board Meeting was changed to the 13th so we could get a nominating committee together. We vote on 1999 officers at the November Club Meeting. Please consider running for an office or board member, there will be a ballot in this newsletter with those already agreeing to run for office and be advised that we always take nominations from the floor the night of voting. You DO need to ask the person you are nominating before hand if they are interested.

The only way to let your ideas be known is come to the meetings and have your say. Get involved as much as you are able and willing. It will be a growing experience! If it is impossible to make the meetings, feel free to call anyone on the board or one of the officers of the club. It's YOUR club. We, as a Board of Directors, really appreciate your vote of confidence in matters that are necessary to keep this fantastic club running.

See ya the 12th of November, 7:30, Hyde Park City Center!

Beanie, KJ7LQ



BARC Repeater System News

146.720, 449.625, 146.800, 145.310, 147.260, 146.640

Welcome to this month's Repeater Corner.

This will be a monthly article that will try to keep you better informed of what is going on with our BARC repeater system.

First of all we have a new email list that any club member can join that will keep you informed and up to the minute with the happenings of the repeater system. To join this list send an email to kc7ozs@barc.everton.com and request to join the list. If you would like to just send email to the list or contact a member of the repeater committee, send it to:

BARC-Repeater@gis.usu.edu

On to the status of the system...

The **146.720/449.625 Mt. Logan repeater** had the new duplexers installed on the 2 meter side about a month ago and seems to be running pretty good except for the problems with the autopatch. All we were going to do was relocate it, which seemed easy enough but the transmitter did not like its new home. So work continues. We hope that it is up and running by the time this article is published.

The **146.800 Sedgewick repeater** was going to be moved this summer to a new site just over the ridge from the current location. With the way things go during a busy summer, that project was not accomplished.

The **145.310 Red Spur repeater** is probably down until next spring. It has a bad transmitter and antenna. If the weather holds out it may get fixed before winter.

The **147.260 Promontory repeater** is running like a charm. This repeater has a PL of 103.5. We were hoping to take the PL off but there is just too much interference at that site to go without it.

The **146.640 Sheriff's office repeater** is still doing great other than a bandit (unlicensed) using it as their cell phone. But we hope that problem is gone!

147.200 We have a new repeater (well a new used) that we are in the process of getting up. This repeater will link back to the Snow Bird System. We are in the process of finding a good path back to Snow Bird on 440. The Snow Bird system has coverage (from what I have heard) from Northern Idaho, most of Utah, Nevada, Arizona and California. More on that repeater in future articles

Just remember that Ham Radio is just a **hobby** and not a business. Work on the repeater system only happens when time permits.

If you have any comments or question for the Repeater Committee please send an email message to

BARC-Repeater@gis.usu.edu

or contact one of the committee:

Bill Neville (WA7KMF) (Chairman) 752-4352

billn@sisna.com

Bob Wood (WA7MXZ), Wally Gibbons (WB7ASQ), Brent Yates (KA7FAP), Andrew Rakowski (KC7OZS), Tyler Griffiths (N7UWX), Mark Hebert (AA1HR), Jeff Tingey (KF7ZX), Dean Stevens (N7WDY), Kevin Reeve (N7RXE), Dave Auger (WB7CFT), Travis Roberts (AB7ZK), Farrell Garr (KC7CWX), or Warren Wilde (N7JYU)

73, Tyler N7UWX

The President's Message

By Farrell Garr, KC7CWX

I was pleased with the positive response I received by telephone from a few members of the Club the day after the last Club meeting. They were generally enthusiastic about the vote they had participated in. Being somewhat new hams they were a little confused, at first, about some of the issues, but as the discussion ensued their questions and concerns were answered, and the vote took place.

As I explained to many of you, by newsletter and face to face, the whole intent of the issues presented for a vote was to try to unify the Club more completely. I, along with the Board, had felt this need for some time, but wasn't exactly sure how to accomplish it. I feel good about the way things went and it's time to plunge forward and onward.

However, I was disappointed, as were several who attended our last Club meeting, at the voter turnout, especially when such important issues that affect the entire membership of the Club were presented. There was 27%, maybe a little more, of the Club membership that was present to vote on the issues and decide for the rest of you, the direction the Club will go on those issues. And I think something needs to be said here about the subject of **VOTING**.

Every one of you that have paid your dues for membership is entitled to a **VOTE** on any and all issues brought before the Club. If you think for one minute that your vote doesn't count, you couldn't be more wrong. One of the issues voted on in the last Club meeting was only defeated by two (5) votes. Which brings me to my next topic for review!

Guess what? It's **ELECTION TIME AGAIN** and time to think seriously about who you would like to represent you for the next year as your Club officers. The Board and nominating committee hope to have at least two (2) candidates for the different offices if possible. If any of you feel that you would like to run for the office of President, Vice President, Secretary, Treasurer or Board Member, or you feel someone you know would make a good candidate, you may make your desires known by nominating them from the floor. We always need good, qualified individuals to run for and to occupy these positions on the Board.

In closing let me just say this: I have thoroughly enjoyed representing you this past year as your Club President. It has had its challenges, as does any position of responsibility, but the rewards have been worth it. We have a tremendous Club with technical minds, especially our repeater committee, and how blessed we are to have such wonderful people as yourselves as a resource to pull from to fill these important positions to run the Club. It's fun to be on the Board! It really is!

Club members, please accept my offer and come to Our Club meeting in November at the City offices in Hyde Park and participate in this important election to the Executive Board and Board. Your vote does count!

Finally, remember this: "Reach for the stars, but keep your feet on the ground."

Mahalo and 73's, Farrell

Letter(s) to the Editor

We received the following letter from Brett Butler N7UXA but is missed the last OTN by one day! So I promised to get it in this time for sure. Editor

Dear Don,

Just wanted to send this along to you as a possible contribution to the newsletter.

I feel it is worth our effort, to each send a letter to Representative Hansen, as this is an issue that could have bearing on all of us.

I copied the letter (see enclosure, ed.) from page 16 of the June QST. The only change I made was the addition of the last paragraph or two. Information about the proposed bill is available in the June QST (Page 15), the August QST (Page 15) and the September QST (Page 15.)

...I just felt this was an issue more people should be aware of, and involved in.

I thought you could include a copy of the letter in each issue. If people wanted, they could remove it from the newsletter, date and sign it, and send it on its way.

Thanks very much
Brett R. Butler N7UXA

Please find enclosed a copy of the letter Brett talked about. Please sign it, and send it to Rep. Hansen. I think any voice we make is better than no voice at all, as our bands are being seriously threatened. Editor

YOUR contributions to this column are welcomed.

You may contact me by:

Mail:

Don Rawlinson WA7VNO
1055 East 2000 North
North Logan UT 84341-2027

Phone:

(435) 752-1269 (Home)
(435) 750-9613 (Work)

E-mail:

donr@deseretonline.com or
don@campbellsci.com

OTHER UTAH TEST SESSIONS

If you would like to upgrade by going to another test session, the following list was contributed by Tyler Griffiths, N7UWX

UTAH AMATEUR RADIO EXAMINATION SCHEDULE Originally Published June 30, 1998

Date	Location		Contact Person
	Home Ph.	Bus. Ph.	
10/27/98* (Tues.)	Salt Lake	C. Eugene McWherter, N7OVT 484-6355	
11/04/98 (Wed.)	Farmington	Marc Uhrey, AB7PL 771-0105 536-4782	
11/18/98 (Wed.)	Provo	Steve Whitehead, NV7V 465-3983 225-5200	
11/24/98* (Tues.)	Salt Lake	C. Eugene McWherter, N7OVT 484-6355	
12/05/98 (Sat.)	Salt Lake	Gordon Smith, K7HFV 582-2438 534-8116	
12/16/98 (Wed.)	Provo	Steve Whitehead, NV7V 465-3983 225-5200	

***Only Novice and Technician elements (1A, 2, and 3A) given at this session.**

Send additions or corrections to Gordon Smith, K7HFV.

PLEASE TAKE NOTE

The next **BARC** test session

12/12/98 (Sat.) Campbell Scientific 8 am Paul Hansen,
WO7N
753-4843

Listen to the Nets for more details.