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Serving the Tri-County area since 1986

KG8RN is Ham of the Year!

The Alliance ARC's annual Christmas banquet was held on Saturday, December 16th. Aside from the lack of peanuts in the banquet room, we all had a great time.

As is tradition, the plaque for Ham of the Year is presented at the Christmas banquet. This years recipient was our president, Jerry Wheeler, KG8RN.

The October issue of the Zero Beat described Jerry as "the new kid on the block." He has just begun his second year as President, and was previously a trustee for the club. Anyone who knows Jerry is familiar with his relaxed, easy-



Our latest Ham of the Year, Jerry Wheeler

going style. Personally, I can't think of a better choice for Ham of the Year. Congratulations, Jerry!

AO-40 is back!

Communications has been reestablished with AO-40. On December 25, Ian, ZL1AOX transmitted am L-Band reset command, which resulted in a steady carrier on 2401.305 MHz.

Ian has since reloaded the IPS Software, and a minimal operating system, and AO-40 is transmitting blocks of telemetry. Initial analysis of the telemetry indicates that some temperature, and possibly some current sensors have been lost in the incident that knocked AO-40 off the air.

The troubles began on December 13th, when ground controllers tried to raise the craft to 50,000 Km Apogee. The helium valves,

which power the motor, refused to open at first. Ground controllers had trouble shutting off the helium flow to the motors resulting in a 60,000 Km apogee, instead of 50,000 Km. Early the next morning, telemetry transmissions stopped.

The next step appears to be a detailed analysis of the incident, as well as uploading of the entire software package. At this time, controllers are avoiding use of the two-meter transmitter, in case it was damaged by the incident,

This story was compiled from ARRL & AMSAT reports

Help Wanted!

The 2 Meter net needs you!

We need net control stations for the Thursday night Two-Meter net.

After January 12^{th,} I won't be available for net control duties.

Please, if you can help us out, contact Bob, K8RLS. I know he'd be happy to answer any questions, and supply you with a copy of the net preamble.



Liftoff of Phase 3-D (now AO-40)

Meeting Announcement

Or next meeting will be Wednesday, January 3rd, in the cafeteria of the Alliance Community Hospital. Talk-in on the K8LTG repeater on 145.37 MHz.

Visitors are always welcome.

Officers

President

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Editor

John Myers, KD8MQ (see above)

Editorial

By John Myers, KD8MQ

We had a problem with the PDF version of the newsletter last month. A few of us had trouble with our machines locking up while downloading. I could download fine via Roadrunner, but not through my dialup. I think I have it straightened out for this month.

As I write this, on Christmas Eve, I'm wondering if there'll be a 17" monitor under my tree this year. One can only hope! Honest Santa, I've been good!

Winter has arrived with a vengeance, in Northeast Ohio. Perfect time to dream about things to do in the warm weather. Rumors abound that there may be a fox hunt this spring. Now's the time to start dusting off your Fox hunting equipment. Hopefully, we'll have more information in next months issue.

The annual Christmas banquet was held last Saturday night, and, as you saw on page one, Jerry Wheeler, KG8RN, was presented with the award for 1999 Ham of the Year. I can't think of a better recipient for this award. The night was good, with plenty of time for fun, and fellowship. This years banquet was held at Texas Roadhouse.

If you supplied info for this issue, I promise, it'll be in the February issue. I had a very nice problem this month. Too much material. So, I had to choose between bumping a few things, or mail the hard copies via parcel post.

Well, that's it for this month's editorial. See you at the next meeting. 73 DE KD8MQ

Meetings

The Alliance Amateur Radio Club meets on the First Wednesday of every month, in the cafeteria of the Alliance Community Hospital. Talk-in is on 145.37 ®. Meetings begin at 7:30 PM. Visitors are always welcome.

Nets

Thursday is our "net night," with the following nets on tap:

Ten meters

CW @ 8PM on 28.400 MHz SSB @ 8:30PM on 28.400 MHz

2 meters

9 PM on 145.37 MHz

Internet

If you'd like to check us out on the web, our E-mail address is:

W8lky@qsl.net

Our club home page is:

Http://www.qsl.net/w8lky

Newsletter Information

The Zero Beat is a publication of the Alliance Amateur Radio Club, P.O. Box 3344, Alliance, OH 44601

Unless otherwise noted, permission is freely granted to reprint portions of the Zero Beat, as long as credit is given to the author & source.

You can submit material to the Zero Beat either electronically, to kd8mq@qsl.net . I can read most word processor formats, but prefer your files to be in straight text, or Microsoft Word format.

We also accept handwritten copy. My address is to the left.

December Minutes

ALLIANCE AMATEUR RADIO CLUB

December 6, 2000

The regular meeting of the Alliance Amateur Radio Club was held at the Alliance Community Hospital on December 6, 2000, at 7:34 P.M., with Jerry Wheeler KG8RN, president, presiding. Secretary David Glass W8UKQ kept the minutes. There were 16 members present. The pledge of allegiance was given, and introductions were made.

The minutes of the last meeting were published in the newsletter. The report was approved upon motion by Ray K8DEN, seconded by Jim N3XTJ.

Mary Ann KB8IVS reported the treasury balances. The report was approved upon motion by Larry KE8VE, seconded by Dave W8UKQ. Old business: Regarding the Mile Branch Grange Fair, Jerry KG8RN reported that the Salem ARC will help with the joint venture with the Columbiana County Red Cross. This would be a public service event. An invitation should be extended to the Alliance Red Cross. The Salem ARC will dedicate a new communications trailer on December 7.

It was suggested that we should investigate having a special event in connection with the Taylorcraft Fly-in.

There was a short discussion of the Christmas party on December 16. New business: Don K8OMO called attention to ARRL Membership Night.

Ray K8DEN displayed his DXCC Millennium Award from ARRL. In 2000 contact 100 countries and send the list of countries and \$10 to ARRL for the award. Congratulations Ray!!

Special events were announced: USS Wisconsin N4WIS during December 7 -10, and Pearl Harbor events.

NCSs are needed for Thursday nights 2 meter net.

John KD8MQ is looking into history of call signs.

The meeting adjourned at 8:30 P. M.

Respectfully submitted, Dave Glass W8UKQ, Secretary

Bouvet (3Y) is on the air!

Astronaut Chuck Brady, N4BQW, is on the island of Bouvet (3Y) and on the air using the call sign 3Y0C. Bouvet is the 10th most-wanted entity on The ARRL DXCC List. Brady, a group of scientists from South America and a team leader from Norway will be there for three months for scientific studies. This is not a DX pedition, but Brady expects to find some time to operate and has been on 20 meters SSB. QSL via WA4FFW. For more information, visit the Amateur Radio Infoline site, http://www.qsl.net/zr1dq --Bernie McClenny, W3UR

Web Wanderings



http://www.qsl.net/wb8erj/



http://members.aol.com/joek0ov



http://www.icircuits.com/mabel-1/

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Fun with MABEL-1

How do you combine many of the best elements of amateur radio into one neat little package? (Orange package, that is.) Try balloon launching, tracking, and recovery for an excellent adventure in ham radio. This ham radio project combines payload capsule construction with electronics, wind and weather prediction, antenna design, and communication on HF, VHF, APRS, the Internet and Amateur TV. Part of the excitement is, in spite of careful preparation, the uncertainty of the flight and landing - where will the payload end up? In a tree or in a lake? Will it survive intact?

A long term appreciation for amateur radio fox hunting eventually led to an interest in balloon launch and recovery. Phil, W8IC was involved with several launches. He became more intrigued with each launch, and thought nothing of getting up at 3 AM to attend one. He learned more from each event. We came up with the idea to launch our own balloon about a year ago. Initially, the plan was to launch a small balloon with a tiny transmitter attached and then hopefully track it down. As time went by, the idea expanded into a full-scale project and MABEL-1 was born. (Michigan Area Balloon Experimental Launch.) We were able to attract the support and expertise of several others, notably Chris, N8UDK and Jeff, N8OPJ, who are ATV aficionados and have a great interest in things that fly. Over the course of several

months, the project began to come together. The parachute and balloon were ordered. The payload equipment was assembled and weighed. (We were restricted to a maximum weight of 6 lbs.) Phil put together a couple of prototype containers. The first was too heavy, and the second fell apart, since the glue that was used ate up the Styrofoam. Jeff took one look, and offered to build the payload container. He used many techniques of radio control aircraft construction. Chris and Jeff combined their expertise, and designed and assembled the payload contents. They also donated most of the equipment for the payload.

The payload equipment consisted of 2 two meter transmitters, for sending voice announcements along with packet and CW data. Also included was a 1 watt amateur television transmitter, for sending video from the 2 cameras on board. Chris designed a video-overlay board which provided altitude, latitude, and longitude info on the video picture. A small but high quality GPS unit was also included. It performed flawlessly at over 90,000 feet. All this equipment was powered by two 15-volt lithium ion battery packs.

It was necessary to predict the wind direction and speed, and web sites were consulted. Ball-track was a useful program. It accepted wind data from the NWS and projected a landing site. Initially, launch day was scheduled for Saturday, November 4. However, it became necessary to delay

the launch one day because of high winds. The hoped-for landing area was to be the mid-thumb area, but it was not to be. Instead, the forecast for Sunday projected the balloon landing site to be in the Howell area, which was acceptable, and the launch was a go.

The crews assembled at a picturesque farm near Bannister, MI, courtesy of Dallas and Robin Sutliff, relatives of Betty, N8SIH. The launch site was perfect. Surface winds were minimal and the day was cool but clear. Doug, KA8QCU managed the balloon as it was filled with 244 cubic feet of Helium. The parachute and payload were attached and the balloon sailed skyward at 11:19 AM (1619 UTC). It drifted nearly straight up and the TV camera transmitted video of the barn below for nearly 10 minutes before starting the trek southeast. At this point, the launch team then switched gears and became a chase team, joining numerous other vehicles with odd looking antennas. John, K8ZEC was equipped with a doppler setup. Others had quad, yagi, and even egg beater type antennas. All were in hot pursuit.

During the flight, HF and VHF nets were handled by Floyd, W8RO, who lives in the Clarkston area, a perfect spot for net control operations in this event. Gerry, K8GER assisted as an alternate NCO when Floyd was occupied on VHF. The 40 meter net functioned very well, bringing in many reports from five states and Canada. Floyd was also able to direct traffic to

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the landing area by observing the APRS Internet site.

A cut-down device had been armed and was expected to release the balloon at 40,000 feet. The device ignited, but failed to melt the string and the balloon continued to rise. It floated 55 miles SE and achieved a height of 94,366 feet before bursting. The video obtained from this altitude was amazing and actually showed the black sky and a curved horizon. The payload was recovered in a clearing in a State Recreation Area 2 miles NE of Milford at 1:45 PM (1845 UTC). It was retrieved undamaged within 18 minutes of landing. Appropriately, Jeff (the payload builder) was the first one to reach MABEL-1. Several other recovery personnel were in the area as well. Keith, W8KD retrieved the parachute and remains of the balloon, while Wayne, N8RAR shot video at the landing site.

Meanwhile, back at the roadside, many more hams had joined the group. All welcomed the sight of Jeff, Chris, and the other deep woods trackers as they emerged from the thick forest carrying the prize. There were lots of cheers and huge grins. As expected, the teams enjoyed exchanging reports of their tracking experiences.

We enjoyed a great dinner and debriefing at a nearby restaurant after the event and the stories continued. The parting comment of most participants was when's the NEXT ONE? A video is being assembled to be shown at an upcoming club

meetings. A web page will follow which will document the entire project.

We wish to thank Frank, N8BNA for the web page and the many hams (too many to list here, but you know who you are and we do too), that participated in this event and/or sent in reports. You certainly helped make it a successful project and we hope you had fun.

See you at the NEXT ONE - MABEL-2. Ann, KT8F and Phil, W8IC



Liftoff of MABEL-1

MABEL-1 Flight Data

Michigan Area Experimental Balloon Launch - 1 MABEL-1 Launch Nov 5,2000 161940z 11:19:40 est Location 4.5 miles ne of Bannister Michigan or 36.5 miles NW of Flint, Mi.

N 43 deg 10.945 min W 84 deg 21.844 min elevation 722 feet asl Balloon 1200 gram Kaymont 244 cubic feet of helium payload 5lb 14 oz parachute and lines 1 lb 12.5 pounds of lift at balloon nozzle average ascent rate 1207 feet per min or 368 meters per min ascent time 1hr 16 min 36 sec burst time 173616z 12:36:16 est burst altitude 94366 feet or 28770 meters asl distance from launch 31.4 miles SE travel N 42 deg 52.629 min W 83 deg 54.475 min descent time 50 min 4 sec average descent rate 1860 feet per min max descent rate 5694 feet per min at 94000 feet descent rate at impact 721 feet per min or 12 feet per second landing time 182620z or 1:26:20 est location 2.3 miles NE of Milford or 14.5 miles west of Pontiac, Mi. N 42 deg 37.334 min W 83 deg 34.545 min flight time 2 hr 6 min 40 sec highest wind 75 mph at 38166 feet (average for 1 minute) total distance traveled 55.8 miles to SE average ground speed 26.4 mph

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Straight Key Night Special Event Station

The Maritime Radio Historical Society will be on the air for Straight Key Night (SKN) from the site of former RCA coast station KPH, using the station's original transmitters and receivers. The call K6KPH will be used.

SKN takes place every year beginning at 0000 New Year's Day UTC (1600 PST Sunday December 31). All sending is by straight key.

Our primary frequency of operation will be 7050 kc/s using a Henry commercial transmitter derated to 1.5kW feeding a double extended Zepp via open wire line. We're working to activate one of the 1950s vintage RCA "L" sets on 14050 kc/s but it is uncertain if we will complete

work on this transmitter in time for the event. If we do it will be using an H over 2 antenna.



The transmitters are located at the original RCA transmitting station at Bolinas, CA ("BL"). The operators will be at the RCA receiving station at Pt. Reyes, CA ("RS") using the original coast station receivers and control equipment. The primary receivers will be Watkins-Johnsons. The transmitters will be keyed by a land line link. The receiving antenna will be an umnidirectional conical monopole.

The Maritime Radio Historical Society has been working with the Point Reyes National Seashore (part of the National Park Service) to preserve and restore KPH with the goal of eventually establishing a museum at the Pt. Reyes receive site. The station returned to the air on seven commercial frequencies under the call KPH in July of this year, the first anniversary of the last Morse message in North America.

We look forward to contacting amateur stations participating in SKN or any station that would enjoy communicating with this historic coast station. We are designing a K6KPH QSL card for the event.

Third Time's a Charm for ARISS Attempt!

It was a historic moment for Amateur Radio. Several hundred youngsters, teachers, parents, and news media representatives were on hand at Luther Burbank Elementary School near Chicago December 21 for the first successful Amateur Radio on the International Space Station school contact.

The third time was indeed the charm, as several pupils plus one teacher got to chat with Space Station Alpha Commander William "Shep" Shepherd, KD5GSL, via ham radio. Earlier attempts to contact Shepherd on December 19 had not worked out, despite the extensive technical preparations.

On December 21, however, Shepherd, using the special NA1SS call sign, came right back to a call from veteran SAREX/ARISS mentor Charlie Sufana, AJ9N, at the school.

Braving repeated snowstorms and frigid temperatures, Sufana and his ARISS team had spent the better part of two weeks setting up gear and antennas for the scheduled contact. The effort paid off.

"I'm happy that we were able to pull it off," Sufana said. "The kids were bouncing off the walls."

During the 10-minute pass, 14 first through eighth graders plus science and math teacher Rita Wright got a chance to pose questions about life aboard Space Station Alpha to Shepherd.

"I think the most favorite thing about being on space station is just the ability to float around in space," Shepherd said in response to one student's question. "It's like you're not moving at all. You're just like in a pool and you can move anywhere you want, but there's no water in it."

Shepherd said the crew is keeping detailed logs about life on the space station. He said the crew was enjoying taking pictures of Earth from space,

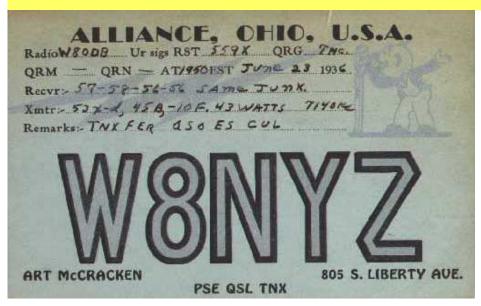
"because you can see things that you can't see from the ground."

At the conclusion of the successful contact, the grateful crowd applauded loudly and offered up a hearty "thank you!" and "73!" to Shepherd and his Russian crewmates. Shepherd signed off by saying that he enjoyed the chat and was looking forward to more school QSOs with youngsters around the country. Another two dozen schools are under consideration for ARISS school contacts. Schools in Virginia and New York are tentatively scheduled for contacts next month.

From the ARRL Letter, Vol. 19, # 49, Rick Lindquist, NIRL, editor

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A bit of History



Art was one of several people who were active in Amateur Radio in the 1930-50's. At the time of this contact, he lived on S. Liberty, a few blocks from Bill Hartzell, W8ODB. Art worked as a radio repairman at Arts Jewelers.



This is one of my old QSL's. Art McCracken was active in the 1930's.

5 years ago

from the January, 1996 issue of the Zero Beat, KD8MQ editor

 In the January, 1996 issue, we mixed the good news with the bad on page 1. The good news was that Gladys, KB8GIA was picked as Ham of the Year.

The bad news was that Amateur Radio in Stark County last one of it's biggest supporters, as Bill, K8JZN passed away on December 2nd, 1995

- The Club call sign at that time was KB8YXT.
- I had announced my impending resignation as editor of the Zero Beat. Lack of time was cited as the reason. My computer responded by crashing it's hard drive.

- The first step in the Vanity callsign process had begun. It was announced that the ARRL had already mailed 9000 copies of the new FCC Form 610-V. The FCC had not yet announced opening dates for accepting these forms.
- The 1995 World Radio Communications Conference was ending. The most controversial matter raised Amateur Radio-wise, was the New Zealand proposal to delete ITU regulation 2735. This is the requirement that Amateurs demonstrate morse code ability in order to be licensed below 30 MHz.
- An article by N8PLA, & N8DZA (now K8LTG) detailed the exploits of Jeff &

- Jake during the 1995 PA QSO Party.
- The FCC field office in Dallas told of a local radio station promotion that was aimed at getting more people to visit the library. They announce that a whole bunch of money was hidden in books in the fiction section. The result? Between 300-800 people descended on the library, 3000 books were tossed on the floor, and the radio station agreed to make a contribution to the library to cover the damages. The whole bunch of money turned out to be \$100.
- A new product this year from Radio Amateur Radio Callbook was the entire callbook on CD-Rom, for only \$39.95.

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Announcing: The First Annual WASH 2 Meter Simplex Contest!

DATE AND TIME:

Saturday, January 13, 2001 from 7 to 11 PM EST. (That's January 14, 0000-0400 UTC to the purists!)

OBJECTIVES:

To make as many contacts as possible (within a 150 mile radius of the Point in Pittsburgh).

To have fun!

BAND AND FREQUENCIES:

The contest will take place solely on 2 meter simplex. The frequencies are: 146.535, 146.550, 146.580, 147.525, and 147.540 MHz. The National Simplex Frequency, 146.520, is NOT to be used.

POWER LIMIT:

Maximum 50 watts output.

EXCHANGE:

Callsign, location and contact number. For the purposes of the contest, "location" is the community (township, borough, city, municipality, etc.) and county you are located in. Locations outside of PA should include the State (see examples below). WASH members will also indicate that they are members.

Example 1: "N3ZEL from N3ZCG, please copy Number 3, Mt. Lebanon, Member." Example 2: "K3CR from N8AA, please copy Number 21, Euclid, OH."

CONTACTS

Work as many different calls and locations as possible, giving Exchange as noted above. Work each station ONCE per location — Mobiles can be reworked whenever they change location. Remember tops of hills work best.

SCORING: Each Contact, non WASH Member: 1 point WASH Member: 2 points

WASH Club Stations N3SH or WA3SH: 3 Points

Multipliers:

Number of locations

Power:

Stations running 10 watts or less: 2 Stations running over 10 watts: 1

Final Score:

Total Points x Locations x Power

AFTER THE CONTEST:

Fill out all the log information. In the upper left corner check whether "base" or mobile." In the upper right corner be sure to enter your callsign and club affiliation (or "none" if not a member of any club). Please number all log sheets consecutively. Log sheets can be downloaded from the WASH web site, www.washarc.org.

SUBMIT LOG SHEETS:

Check your log sheets carefully for dupes. Verify that all information is entered. Send the logs to:
WASH 2 Meter Simplex Contest
Ed Oelschlager, N3ZNI
P. O. Box 254
Meadow Lands, PA 15347-0254.

Enclose a SASE #10 for return of results. Entry Deadline: February 8th, 2001

Each log submitted with SASE on or before the deadline will receive a raffle ticket to WASHFest 2001 on February 25th!

Some of us have been in the hobby for a little too long. This problem is very simple to detect, you just need to know where to look.

You know you've been a ham too long if: (Part Two)

- Even worse, you have to manufacture your own AA's because you use so many.
- You have a 2-meter handheld in every room of the house.
- You have installed coax connections next to every phone line.
- You have so many APRS trackers that other hams complain about you jamming the frequency.
- Your logbook collection rivals the local library.
- You have enough old tube transmitters to light the house with.
- Your wallpaper covers all the walls in the house.
- You have personally funded eight OSCAR satellites.
- You sponsor so many repeaters that the U.S. is quickly running out of callsigns ending in your initials.
- Your shack is actually a shack in the backyard because the XYL kicked you out of the
- Your neighbors think that your RFI and TVI came with the house.
- Your other neighbors complain because they are on the same transformer as you and when ever you transmit, their whole house has a blackout.

(from Tom, KB1EVZ via E-Ham. net)

Look for more of this list next month. Maybe you'd like to add some of your own?

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January 2001

Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Straight Key Nigh	2	3	4	5 ARRL RTTY Roundup	6 ARRL RTTY Roundup
7 ARRL RTTY Roundup	8	9	10	11	12	13 North American QSO Party, CW WASH 2 Meter Simplex Contest (see page 6)
Cuyahoga ARS VE Exams Gary Dewey 216-642-1399 North American QSO Party, CW WASH 2 Meter Simplex Contest (see page 6)		16 20/9 VE Exams Dave, KC8WY 330-799-5600	17	18	19	20 ARRL January VHF Sweepstakes North American QSO Party, Phone
21 ARRL January VHF Sweepstakes North American QSO Party, Phone	ARRL January VHF Sweepstakes North American QSO Party, Phone	23	24	25	26 CQ WW 160- Meter DX Contest, CW Kansas QSO Party	27 CQ WW 160- Meter DX Contest, CW Kansas QSO Party
28 CQ WW 160- Meter DX Contest, CW Kansas QSO Party Tusco Hamfest Email: kb8wfn @tusco.net	29	30	31	December (S M T W T 3 4 5 6 7 10 11 12 13 14 17 18 19 20 21 24 25 26 27 28 31	S F S 1 2 8 9 4 5 15 16 22 23 3 29 30 18 19	February 01 T W T F S 1 2 3 6 7 8 9 10 13 14 15 16 17 20 21 22 23 24 27 28



Alliance Amateur Radio Club P.O. Box 3344
Alliance, OH 44601

The Radio By Samantha Molesky

When you see an amateur radio station as well as the next person, you might think, oh no, not another noisemaker. Morning, noon and night, you hear the sound of squeaks, and squawks. Occasionally you hear "CQ, CQ", and a series of letters and numbers, being called out by somebody you hardly hear. The person in front of the mike is ecstatic. Excitedly telling you that the call has come all the way from Aus-

tralia. Writing down frequency, time, name, and call letters. They agree to meet the next day, same time and see if things change with weather conditions.

In my mind, a phone call is a lot less complicated and a lot less noise. I was told in no uncertain terms that this method, cost less (unless you count money tied up in equipment), more traditional (that's why there is a computer hooked up next to it), and able to

talk to people that share the same interest in radios (I had no come back to that.)

If I have to honestly think about the radio and whether or not, I like it, I have to say yes. It keeps them occupied, their minds are constantly working on how to upgrade, extend range, and how high the antenna will need to be.

I guess my husband and father-in-law are all right in this pursuit.