

telstar



THE MONTHLY NEWSLETTER OF STARS (SOUTH TOWNS AMATEUR RADIO SOCIETY)

ISSUE 152

MAY, 1994

ATV To The Edge Of Space!

By Howard Kraus K2UD

It is true that with Amateur Radio, the sky is the limit. The Amateur Television Group of Western New York is going to prove just that when they launch, to the edge of space, a balloon carrying both ATV and 2 meters. Now wouldn't you like to be a part of history?



Would You Like To Ride On My Video Balloon?

Project Manager Roger Garbacz, WA2CXW, explains that the ATV Group will release into near Earth orbit a helium balloon of the type used by the National Weather Service. The group's mission: to send live video of the Earth far below for all who are able to receive ATV, and to send a 2 meter beacon for the ultimate in transmitter hunting. This will be the first launch

May Meeting

The May club meeting will begin at 7:00 PM at the Hamburg Youth Center (corner of Prospect and Hawkins Avenues) on Thursday, May 5.

All interested in amateur radio are invited; neither club membership nor an amateur radio license is required.



Now that good weather is arriving, we have lots of different activities to cover. We will be talking about Field

Day, bike treks, the balloon flight, transmitter hunts, the Erie County Fair, hamfests, and much more.

Our speaker for the night will come from the Buffalo Field Office of the FCC and will tell us about their local activities.

of its type in the Western New York area, and possibly the first in New York State.

But I Thought ATV Was A Recreational Vehicle?

ATV, as opposed to Slow Scan Television (SSTV) allows amateurs the ability to transmit live-motion, near broadcast quality video to other hams on frequencies allocated to amateurs. The source of the sent video can be your camera or camcorder, VCR, digital storage, your computer or computer game, even re-broadcasts of National Weather Service radar or Space Shuttle downlinks! Imagine sending your family across town without leaving home. (You can even shoot your mother-in-law!) The possibilities are limited only by your imagination.

See ATV Balloon on Page 4

★ STARS ★

STARS & ARRL Memberships

Membership in STARS is open to anyone with an interest in amateur radio; an amateur radio license is not required. Membership applications may be obtained by sending a SASE to Frank Modzelewski WG2H, 1818 Clinton Street, Buffalo, NY 14206, from the newsletter editor or from board members.

Annual dues are payable on January 1 and are \$15 for a single membership, \$23 for family memberships and \$8 for a student membership (through grade 12). The dues are pro-rated on a monthly basis for new members plus there is an initiation fee of \$5 when first applying to the club. For example, a new member joining in July would pay \$7.50 (6 months X \$1.25/month) plus the \$5.00 initiation fee for a total of \$12.50.

Applications should be returned to Frank WG2H along with the appropriate dues. The applications will be reviewed and voted on by the Board of Directors at their business meeting. The applications are then voted on by the general membership at the next regular club meeting.

Members should send their ARRL renewal memberships to Jack Cullum, Jr. KB2ESM, 6871 Webster Rd., Orchard Park, NY 14127 along with a check made out to STARS. No extra cost to you and STARS benefits!



Club Nets

STARS club nets are open to all to exchange information on local amateur radio activities.

STARS HF net meets at 10 AM local time on Saturdays on 3.925 Mhz +/- QRM. Net control is usually Guz WB2EZU.

STARS VHF net meets at 7 PM on Wednesdays on STARS club repeater WB2ELW 147.09/.69 (output/input). Net control is Tony KB2OUT.

STARS Swap Net meets at 7 PM on Tuesdays on STARS WB2ELW 147.09 repeater. Net control is Jeremy N2UIW.

Hidden Transmitter Hunt

A hidden transmitter hunt will be held on Saturday, May 14. All are invited to participate.

We hope to start getting some STARS members on hunts so that we can host hunts later this summer. The hunt will begin in the parking lot of the Getzville Fire Co. at 630 Dodge Road (just west of Campbell). Participants should be there in time to register and then begin the hunt at 9:30 AM.

The Hidden Transmitter Operator for this hunt will be Terry Rockhold KM4XZ. Terry received this privilege by winning the hidden transmitter hunt held on April 23 using the doppler radio direction finding unit that he demonstrated at the April STARS meeting. Teams competing on Saturday were using all kinds of equipment similar to what was shown at the STARS meeting, such as beams, quads, hand-held homing units, etc.

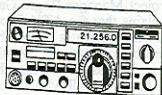
The finishing order will be determined by elapsed mileage with order of finish as a tie breaker. The transmitter will be within a 10 mile radius of the start point. At five minute intervals after the start, the operator will be making voice transmissions on the assigned 2 meter simplex frequency of about one minute in duration.

The hunters will rendezvous at a restaurant near the finish location and the winners will be announced.

For more information, call Terry at 656-0865.

For Sale

Yaesu FT-747GX HF transceiver with mobile mounting bracket. \$450.00. Contact Woody KB2ESN at 823-0055.



STARS GOSSIP COLUMN

Hope everyone enjoyed the April meeting. Terry had another hands on display, featuring transmitter hunting and the equipment needed to do a good job. Howard K2UD demonstrated the ease and knock down of the equipment to transport it in your vehicle. Everything was nicely displayed. It is marvelous how sensitive the pick up antennas were to pin point the transmitter which as a rule only put out 2 to 4 watts signal. It is nice to see how the lights light up as the beam is swinging to the transmitter signal and then dim when they are off the main signal. Some of this equipment can also be used to track down interfering signals to spot where they are coming from.

How many of you get QST magazine? On page 70 in the April issue 1994 is a very nice picture of antenna work. Please remember this is the APRIL issue, HI, HI!

John KA2RFT, our Field Day Chairman, came up with a good suggestion, in order to operate more efficiently and better enjoy the affair. it sounds like fun and more points.

Greg KE2VW, Chairman for our exhibit at the Erie County Fair, has assured us that the Erie County Agricultural Society has a great spot for us. So see Greg and get your name on the list to assist him. It has been quite a few years since we participated in the action at the fair and sure enjoyed it.

Greg KE2VW must be congratulated on the nice "Packet Racket" article that he has put into the club paper and I am sure that everyone looks forward to it and how to utilize it for better efficiency on the BBS.

With all this action going on, please do not forget to check into the nets that STARS has in order to keep you posted to the latest info. Also remember that the Nike Base Club Station is open on Saturday afternoons and even on some Sundays, so listen to our repeater for the times.

Happy Hamming Guz WB2EZU

Public Service Events

I would like to take this time to thank all of you who volunteered your time to help out with the MARCH OF DIMES WALKAMERICA. (4-24-94) THANK YOU.....Mark-N2LAB, Mike-WA2HEV, Bob-N2UKT, Ralf-N2UKU, Terry-KM4XZ and anyone else I might have missed.

We are also looking for amateur radio operators to help provide communications for two charity bike treks in June.

The first is sponsored by the American Lung Association. It will begin at Chesnut Ridge Park on Saturday June, 18th and will ride to an overnight stay at a private camp north of Franklinville. On Sunday they will return to their start point.

The second is the Multiple Sclerosis Society Bike Classic. The 100 mile ride will begin on Saturday June 25th at Darien Lake State Park, or they can choose a 60 mile ride beginning at

Chesnut Ridge Park. Both courses will end at St. Bonaventure University for a fun night of partying. Most of the riders will then ride 60 miles on Sunday back to Chesnut Ridge Park.

No matter whether you can help out for one day or two, one event or both, WE NEED YOU !! Anyone interested in volunteering or for more information on either event, call Tony-KB2OUT at 826-7643 or Terry-KM4XZ at 656-0865

Thank You !
Tony B. Jr. KB2OUT

STARS Swap Net

Jeremy N2UIW has been appointed as the new net controller for the STARS Swap Net which meets every Tuesday on the STARS 147.090 repeater. Tony KB2OUT as volunteered to be alternate net controller when Jeremy is not available.

During the summer, the start time for the net is changing from 7:30 PM to 7:00 PM.

ATV Balloon

Continued From Page 1

The ATV group's video will be captured on a small closed-circuit TV camera. This will be sent to us Earth-bound creatures on 439.25 MHz by way of a low-powered GLB transmitter, modulated for video use.

At an altitude of 100,000 feet (nearly 19 miles high!) good video signals will be seen at least 200 miles away. Snowy signals and sync bars may be seen as far as 400 miles from the balloon. In addition to camera video, temperature and pressure info will be sent as part of the video picture.

Where, Oh Where Has My Balloon Gone?

Also riding onboard will be a 2 meter transmitter for the primary purpose of locating the package upon touchdown. This low power signal on 144.34 MHz will send auto CW information which identifies the balloon, the ATV group, and will announce the video frequency to alert other ATV'ers who may not be aware of the flight. 144.34 MHz is a popular frequency used by ATV'ers in this part of the US. Give a listen sometime, you may be fascinated by what you hear.

I Hate To Burst Your Balloon, But ...

When the package reaches an altitude of 100,000 feet, a command will be sent to it that will release the balloon and open a parachute for the return flight to Earth. We chose to release the balloon at this level in order to save the package from destruction. This could occur when the balloon naturally bursts around 130,000 feet. Now is when the fun begins! Transmitter hunters, man your dopplers! Be part of this area's ultimate transmitter hunt and help snare our Earthbound package.

I am calling on all those interested in helping to locate our package to come out for a possible day-long hunt. With an early morning launch, and about a 2 to 3 hour flight, we expect the package to come down sometime around noon perhaps some 50 to 100 miles NE of the Buffalo area. Could you be the person with out-stretched arms that will be seen on video at touchdown?

57 Channels With Nothin' On

Tired of what passes for entertainment on your TV? Why not become involved in ATV? If you have a TV, camcorder, a 430-450 MHz antenna, and possibly a UHF amplifier, you only need one more item to be part of a truly moving part of ham radio: an ATV transceiver. Or use an inexpensive transmitter and your existing TV and cable box (or VCR tuner) and get ready to see as well as hear who your are talking to! If you wish more information on ATV or the ATV Group of Western New York, give Howard Kraus, K2UD, a call at 838-2406. Call him also if you would like to be a part of history on June 4th (rain date June 5th). Come and see what we have been talking about, and don't forget your 2 meter direction finding equipment.

After all, THE SKY'S THE LIMIT!

KE2VW/Repeater

The KE2VW/Repeater is now back up and running! Located in Perrysburg, NY, this repeater will serve as the STARS southern machine and will serve the Western Region including Gowanda, Fredonia and North to Niagara Falls!

The frequency pair is 146.97/.37 MHz (use -600 KHz offset). You'll need to use the new PL tone of 151.4 to access this repeater.

Please keep me informed about the repeater's performance in your area. The KE2VW repeater is open to one and all !!!

Thanks, enjoy and my very 73,
De Greg, KE2VW

STARS Board of Directors

President	Terry Rockhold	KM4XZ
Past President	Greg Young	KE2VW
Vice President	Norm Jones	KD2KK
Treasurer	Jack Cullum	KB2ESM
Fin. Sec.	Frank Modzelewski	WG2H
Secretary	Dave Baco	WA2TVT
Director	Vern Siegel	AA2AC
Director	Shane Brady	WB2WPM

Code Can Be Fun

About two years ago I passed my 5 WPM code test for my Technician Plus license. At that point I said, "NO MORE CW FOR ME." I had no interest in it.

I never thought I'd say, CW can be fun! I want to upgrade so, back in Jan. of this year I started studying the code again. I am pleased to say, my code speed as of the end of April is up to approx. 9 WPM.

There are a few of us who practice the code in the evenings on 10 meters. Anyone who is interested in learning is welcome to join in on our sessions. Give Tony KB2OUT a call at 826-7643 for more info.

If you have no code background and would like to learn, I have the latest Ver. of Super Morse 4.06 for the computer. This version will work with Sound Blaster and a few other sound boards. If you have a phone modem you can download Super Morse from Greg's (KE2VW) land line BBS at 537-9334. If you have packet ability you can download it from Greg's (KE2VW-5) BBS on Freq. 145.710 for 1200 Baud or 446.825 for 9600 Baud users. There are a lot of ways to study code but, most will agree that the best way is to just get up on the bands and start copying.

Here is a schedule of W1AW code practice sessions:

Slow Code: 9 AM on Wed & Fri; 4 PM and 10 PM on Sun, Tues, Thurs, & Sat; 7 PM on Mon, Wed & Fri.

Fast Code: 9 AM on Tues & Thurs; 4 PM and 10 PM on Mon, Wed & Fri; 7 PM on Sun, Tues, Thurs & Sat.

Frequencies: 1.818, 3.5815, 7.0475, 18.0975, 21.0675, 28.0675 & 147.555 Mhz

Slow Code = practice sent at 5, 7 1/2, 10, 13 and 15 WPM

Fast Code = practice sent at 35, 30, 25, 20, 15, 13 and 10 WPM

Code practice text is from the pages of QST. The source is given at the beginning of each

practice session and alternate speeds within each session. For example, "Text is from July 1992 QST, pages 9 and 81," indicates that the plain text is from the article on page 9 and mixed number/letter groups are from page 81.

There are also code bulletin's at 5 PM, 8 PM and 11 PM sent at 18 wpm

Qst lists various Code Proficiency runs through out the year where code is sent at various speeds, similar to code practice and you can submit your copy (1 min of solid copy out of 5 min at whatever speed you copy), to the ARRL and they will send you a certificate and/or endorsements for Code Proficiency suitable for framing.

Enjoy Yourself !!

Tony Balas Jr. (KB2OUT)

Congratulations!

Gary (Woody) Wood KB2ESN is now an Extra Class Ham!

Pat Murray NW2I passed the Commercial Radio Exam for the General Radio Telephone License!

Congratulations to these two STARS members.

If you have got a new license, upgraded, or got a new call, let Terry KM4XZ know at 656-0865 so that we can tell the other members.



New Members

We would like to welcome the following new STARS members:

Joseph Werner N2MWO
Donald Yaxley Jr. KB2QKE
Paul Julyan WB2KFL

Please welcome these new members when you get a chance to meet them!

"PACKET RACKET"

an introduction to packet radio, part 4

In part three of this series I reviewed using digipeaters, and explored how to set up some of the commands required by your TNC, to allow you success on the air! This time we will cover additional commands:

TXDELAY : This determines how soon your packet will be transmitted after the tnc keys the radio. The purpose of TXDELAY is to insure that the first few parts of the packet don't get cut off by a slow-keying transmitter. You will have to set this based on the transmitter you are using. Acceptable values for today's solid state rigs range from 25 to 35 msec. Longer TXDELAY values just take up air time, and slow your throughput down.

You can figure that TXDELAY works the same way that you do on voice....you wait a second or so after keying the mike before you start talking....well, that's TXDELAY!

There are more settings which control your tnc, but the ones we have covered make the difference! There are also two settings for your RADIO which are important:

DEVIATION: W3IWI recommends a deviation of no more than 3 Khz for optimum packet operation. Over deviation will result in lots of retries and timing-outs. Setting your deviation has been simplified. The initial steps are outlined in your tnc user manual (you remember that one.. the manual I told you to become familiar with before you got on the air!). Once you have a ballpark idea, simply connect to the STARS node, currently on 145.65 Mhz, by typing: C STARS Once you receive the connected message, then type: MH. You will then receive the MyHeard list, with the deviations of the stations displayed in Khz! An acceptable range is 2.0 - 4.0 Khz, with the ideal being 2.5 - 3.5 Khz.

VOLUME: Your volume-control is the most important setting on your radio insofar as receiving packets is concerned. If you have the volume too loud, the tnc will not be able to successfully decode the packets, and if the volume is set too low, the tnc will not "hear" the packets. The best method of setting your volume

control is to open your squelch and increase your volume control until you just see the DCD light on the tnc come on. That's your setting!

MAXFRAME: This is the last setting you need to worry about right now. MAXFRAME works with PACLEN to determine how much information your tnc will send out at any one time. MAXFRAME is the number of packets you want to have sent out "unacknowledged" by the receiving station, until your tnc will send out more packets. On a nice quiet channel where you are in within close proximity of the receiving station you are communicating with, the MAXFRAME can be as high as 4. Few have this situation however, so your MAXFRAME setting should be set to 1 or 2, to reflect the channel's conditions.

To finish up our basic commands, I will review some tnc commands that affect the way packets are displayed on your screen.

MCON: If ON, you see packets from other stations while you're connected to someone else. This can get very confusing, but is useful when your path is bad and you want to see if your packets are being received okay. If OFF, the monitoring of other stations is stopped when ever you're connected to another station.

MRPT: If ON, you see a display of all the stations used as digipeaters, along with the station originating the packet and the destination station. If OFF, you see only the originating and destination stations. For example, if you have MRPT ON, you might see a transmission such as this: KE2VVW>WA2TVT,KF2LN-2*. I'll be leaving for the meeting at about 7:30. If MRPT was OFF, the same transmission would look like this: KE2VVW>WA2TVT: I'll be leaving for the meeting at about 7:30. In the first case, you can see that the KF2LN-2 digipeater was being used. The asterisk indicates which station you were directly hearing the packet from. In the second case you have no idea if digipeaters are being used or what station you were receiving..

HEADERLN - If you have this turned ON, the header of each packet is printed on a separate line from the text. If OFF, both the header and the packet text are printed on the same line.

MSTAMP - Monitored packets have the date and the time the packet was received idisplayed if

Amateur Radio Examinations

STARS will hold test sessions on June 18, 1994 at the Hamburg Youth Center (Prospect and Hawkins Aves.). Walk-ins should arrive by 9:00 AM and pre-registered candidates should arrive by 9:45. The tests start at 10 AM. For information on STARS test sessions, contact Norm Jones KD2KK at 824-1148.

Lancaster ARC (LARC) will hold test sessions on May 18 and June 15, 1994 in Lancaster, NY. For information, call Chuck Koester WD2AIK at 937-3592.

ARATS will hold test sessions on May 7 and June 11, 1994 in N. Tonawanda, NY. For information, call Vern Siegel AA2AC at 693-5977 (days) or 634-5276 (nights).

Lockport ARA (LARA). For information, call Judy Cianchetti at 751-9223.

Most sessions except for STARS do not allow walk-ins, so call ahead and make a reservation.

MSTAMP is ON. If it's OFF, the date/time stamp is not shown.

Try these commands and then decide on what you like for your station.

This will do it for our parameters! In next month's article I will take you through connecting to a full service BBS, and beginning to explore the many powerful built-in features and servers available to those of you on packet in this region! All basic commands covered will work on any of the local BBSs, which all use the same software, designed by F6FBB. Thanks to WA1LOU, WB9LOZ, KB4VOL, KO6GGD, and KA3RFE for some of the text for this series.

Until next time, 73, and keep those packets flying!

Greg, KE2VW, SysOp of the
STARS KE2VW BBS

STARS Raffle

We are going to be holding another big raffle to help raise funds for the club.

The prize will be an AEA PK-88 packet TNC.

Tickets will be on sale at the May and June club meetings.

The drawing will be made at the Lancaster Hamfest in June.

We had a lot of good response to a similar raffle we held last year, and we hope that this year's will be even bigger. This is a very painless way to raise funds for the club, and, who knows, you might be the big winner!

For more information, please contact Shane Brady WB2WPM at 675-5797.



STARS Tee Shirts

New members and others will have a chance to obtain one of our great read, white and blue club tee shirts to wear to Field Day, hamfests, bike treks, etc. this summer.

Orders will be taken at the May meeting for the shirts, which cost \$10 for Small through X-Large, \$11 for 2X and \$12 for 3X.

If you can't come to the meeting, call Terry KM4XZ at 656-0865 to order a shirt.

Rochester Hamfest

The 60th annual Rochester Hamfest will be held at the Monroe County Fairgrounds on Friday, Saturday and Sunday, May 20-21-22. They expect a crowd of over 7,500 for the weekend.

The flea market opens at noon on Friday and runs continuously for the entire weekend. The indoor exhibits open on Saturday and Sunday at 8:30 AM.

Tickets are \$6 advance sale and \$8 at the door. Flea market permits are \$5 for each tailgate spot.



STARS



Club Repeaters

The club repeater (WB2ELW/R) is located near Colden, NY (147.09/.69 output/input). The repeater is open to all amateurs. Autopatch privileges are available to club members.

The southern club repeater (KE2VW/R) is located in Perrysburg, NY (146.97/.37 output/input, with PL access of 151.4 MHz). This also is an open repeater.

Club Packet

The STARS KE2VW BBS is located in Colden, NY. On 145.71 MHz: C KE2VW-5 or BBSVW. From the South, on 145.65 MHz, C BLISS, then C BBSVW. On 446.825 MHz, you can connect using 9600 baud directly to BBSVW.

Using a telephone modem you can reach the STARS KE2VW BBS by calling 537-9334.

Club Meetings

Club meetings are normally held on the first Thursday of the month at the Hamburg Youth Center (Prospect and Hawkins Aves.) at 7:00 PM. Everyone is welcome; neither club membership nor an amateur radio license is required.

Business meetings are held on the third Thursday of the month at the Nike Base Club Station at 7:30 PM and are open to all club members.

Club HF Stations

The club Nike Base HF Station (WB2ELW) is located on Lakeview Rd. 1.75 miles e. of Rte 20 next to the Hamburg Town Arena. The station is operated on most Saturdays between 1 and 3 PM local time and is a great DX station. All are welcome.

A second club HF station is located at the Hamburg Youth Center.

STARS

Terry W. Rockhold KM4XZ
4805 Transit Road #1903
Depew, NY 14043
(716) 656-0865



JOHN CULLUM JR. KB2ESM
6871 E. WEBSTER
ORCHARD PARK, NY 14127