

OREGON AMATEUR TELEVISION

Fall

October 2000

Seattle ATV Repeater Details

WWATV sent along some details on their latest ATV repeater equipment. They've been using this new setup for almost a year now.

The new ATV repeater consists of a Pauldon 70 Watt amp driven by a PC Electronics TX-23 transmitter on 1253.25 Mhz AM Output. The receiver is also from PC Elec. operating on 434.00 Mhz AM. The controller was replaced by a home brew unit consisting of a Motron controller which also supplies the CW ID and a PC Elec. VOR-2 and a few other timing circuits and 16 switched outputs



for playing around. The power supply was replaced with a 30 Amp unit. Video ID is supplied by a live camera inside the box which makes it rather fun to watch the bugs crawling around.

ATV..... Radio With Vision !

Salem to Portland Linking

(Part 3 of the saga of the 2.4 link between Salem and Portland)

The Salem link is up and running. Now we hope there will be more Salem ATV activity.

Recently the Salem ATV group made some additional adjustments to the pointing of their 2.4 link antenna aimed at Portland. This adjustment made the 2.4 GHz link to Portland a functioning reality! After sorting out a power supply problem at Salem the link seems to be reliable.

A last change in Portland will be some fine pointing adjustments for our 2.4 receive antenna and swapping the 2.4 temporary receiver for the original receiver. This will put the Salem 2.4 transmitter and Portlands receiver back on the same exact frequency. This should reduce the minor interference we have seen over the link from Salem.

A special OATVA thanks to Dan Bathurst, WA7ABU for his efforts on getting the 2.4 link working. Dan just kept plugging away at the troubles, always optimistic and was instrumental in fixing failed components as needed on the Salem ATV system.

Oregon Amateur Television Association

3210 SW Dosch Rd.

Portland OR 97201

<http://www.lloydio.com/oatva.html>

Newsletter published quarterly

Bring your latest gizmos to the October ATV meeting. It's a great chance to share knowledge about ATV and give new ideas to the other members.

NEXT MEETING.....

Next ATV Meeting will be on Monday, October 16; at Ed Mellniks office (EMA Video) 1306 NW Hoyt Street, Portland Or.

RSVP for Pizza on the net or by leaving message on 241 8663. 6:30 for pizza and 7pm for the meeting.

We'll review the status of the ATV repeater and the link to and from Salem. Also on the agenda is a short discussion of what's to be next. You know, do we build another repeater, change to another band or ...? And we can discuss the Rickreall Hamfair and how to promote ATV there.

OATVA dues are paid once per year in January. The actual due date is January 1. The dues provide for rent on the tower, newsletters, and other publishing costs, and helps to support ATV promotion in the local area.

OATVA Dues: \$30 per year or \$55 for two years

Its never too late to pay your dues if you have forgotten!

Donations are also accepted with great enthusiasm.

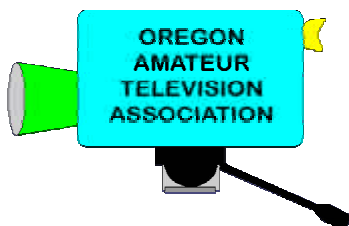
Make your checks payable to OATVA.

Mail to OATVA
3210 SW Dosch Rd
Portland Oregon 97201

Or you may pay at any general meeting.

Thank You Again

A special thanks to Gail Sells, W7AMQ for his generous donation to the club last month. Thank you, Gail, you have given the club another boost.



We are looking for a few good downconverters

There are a few Salem folks that are looking for 1.2ghz down converters. Since the Salem system is an AM output they need downconverters for new members. While it is not recommended, Ed Mellnik will take any downconverters to the October 21st Rickreall Hamfest to sell for you. You can bring them to the meeting or call Ed to pick them up.

Ed suggests that most of the Portland group should keep their downconverters since our repeater is AM capable should the FM system fail.

The going price for a used downconverter is about \$70.

The Parabolic Dish

What can you do with a free parabolic dish? The sky is the limit. Dishes are a truly unique form of antenna. You only need to change the feed antenna to change frequencies. The geometry of the dish itself remains static at all frequencies. The focal point of the dish is a function of the curvature of the dish and its' diameter, unaffected by frequency changes. Put the feed at the focal point and you're ready to radio.

A dish used to receive 2.6 GHz satellite broadcasts can be used for a 426 MHz ATV transmission antenna by just changing the feed horn. The neat thing is that as the frequency increases, a given dish increases in gain. And even though lower frequencies let a Yagi antenna perform as well or better than a dish, in the bands above 70cm, the dish becomes increasingly practical.

Another facet to the parabolic dish is the narrow beamwidth of the energy transmitted. With a proper feed the beamwidth for a seven foot diameter dish, using 426.25 MHz as the frequency is 23 degrees at 3db down points (half power). This is roughly similar to a 29 element yagi with a boom length of 22 feet.

