



The Yavapai ARC Signal



Vol. **I** No. 2

A Monthly Newsletter

January 1992

YARC RFI Committee

First RFI/TVI complaint handled. See page 1.

6 Meters

Latest reports on recent band openings. See page 2.

VE TESTING

Testing sessions are held every 3rd month of the year and the second Saturday of the month. Next session will be held at the Salvation Army Building 237 S. Montezuma at 9:00 am on Saturday February 8, 1992.

ECLIPSE

Fred and Rex's most recent expedition. See page 3.

CLUB NET

Net meets on the 146.88 repeater every Wednesday evening at 1900 hours on W2YAV repeater. The purpose of the net is to gather briefly on the air and exchange information.

MIR

Cosmonauts to return March 25th. See page 3.

RFI

Radio Frequency Interference- RFI is a problem many of us have had to face. Last year

the FCC formed a new program to resolve RFI/TVI complaints. Working with the ARRL through local ham clubs, the FCC formed a pilot program in Arizona to set up local RRC committees to resolve complaints.

Having encountered his own share of problems, Jim Helmericks, AA7GP answered the FCC's call for volunteers last year. Kate Henton of the FCC district office in Douglas presented the pioneer program to local hams at the FT. Tuthil hamfest in Flagstaff. Nine Arizona ARC's formed committees among them the Yavapai Amateur Radio Club's RRC Committee which is chaired by Jim AA7GP.

The key, as Helmericks sees it, is in communicating with all the parties involved. By doing so the RFI committee acts as a go-between among the parties involved so that hurt feelings can be minimized if not avoided.

YARC's RRC Committee handled the first complaint of possible RFI/TVI interference dated 15 November 1991 from the FCC. Through the efforts of N7OBK Al Barber, WA6JBV Frank Horneff, N7SCT George Prehmus, AA7GP Jim Helmericks (chairman), and all the

parties involved, the complaint satisfactorily resolved. The committee so notified the FCC by letter 3 January 1992.

The past six months of effort and the recent first experience have inspired Jim to suggest that not only can the committee handle future complaints, but can minimize them by raising RFI/TVI awareness among fellow hams. Plans are in the works to furnish test filters and run tests to insure stations are clean.

So far, cooperation from the power company, phone company and cable company has been excellent. Anyone having problems, or that is willing to assist the committee in its work is encouraged to call Jim AA7GP at (602) 776-0619. The committee, in the finest tradition of ham radio, stands ready to serve.

6 METER NOTES

Multiplying by 3.2808 the figure 6 gives a result of 19.68 feet which would be another, non-metric way of referring to the band many amateurs have overlooked.

Perhaps after reading this short article you too will want to join in on this band, whatever you may call it.

Just this last Sunday while our area was experiencing dark overcast skies with some light snow, a spectacular band opening occurred.

Generally from 8:30 until

shortly before 11:00 a.m. the band had a very good opening to the eastern portion of the U.S. Most notable was Mike, WB8VLC's contact with another station in Pennsylvania on a 2 watt HT which he had built himself. After having made his initial contact on his base station with an output of around 70 watts, Mike tried a contact with the Pennsylvania station.

Remarkably his signal was reported as 5x9. Another station in Connecticut reporting it clear but low in signal strength.

Before long there were several other stations joining in on 52.525 Mhz from Maine, Massachusetts, Louisiana and one 'local' from Phoenix, N7TVU Will a new comer to the 20 foot band.

In addition to the FM contacts, N7PJN used his Yaseau 690 to listen to three beacons on 50.065, 50.075 and 50.095. Also heard quite well that day was someone in grid square FL-16 who was on 50.126 USB talking with numerous stations in the pacific northwest. No record of this station's call was made. For more information contact Rex, N7NGM at 445-0685 or try 146.88 repeater.

Propagation on six can occur in several ways. Sporadic E is caused by ionized clouds that form at the altitude of the ionospheric E layer of approximately 50 miles above the Earth. This gives rise to a propagation condition called E skip that has erratic comings and goings. By its scientific name "intense

sporadic E" may last a few seconds to a few hours and can permit contacts from the East coast to Hawaii using even low power stations to work DX.

Auroral propagation is caused by solar particles which travel at less than the speed of light and are deflected by geomagnetic fields towards the solar regions. Frequently the ionization is so great that the aurora is capable of reflecting radio signals. Contacts via auroral reflection are common on 6 meters.

Trans-equatorial propagation usually occurs during the spring and fall months when the F layer is just below 50 MHZ. It is often possible to work stations in the southern hemisphere during periods of ionospheric tilt. The tilt occurs when the part of the ionosphere above the equator settles slightly. A signal which is slightly bent by the northern part of the tilt and which might continue off into space is reflected back to Earth by the tilted southern part. The stations in contact are usually the same distance on either side of the equator. There is plenty of 6 meter activity in south America so if you hear a fluttery signal signing a latin american call don't be too surprised.

ECLIPSE

Rex N7NGM and Fred N7PJJ traveled to California to view the Annular eclipse on January 4th. The preceding days were filled with rain storms followed by sunny days, so as eclipse day arrived, it

looked like another storm was going to move into the area just as the Sun was setting. Several contacts were made on local repeaters to coordinate the viewing of the eclipse.

Arriving in the Dana Point area a couple of hours prior to sunset, a decision was made between Dana Point or traveling a little further south and view it closer to San Diego.

The 'ring of fire' was seen and more importantly, bearings and times of the Sun were taken. This information will enable Fred and Rex to better predict where in the mid-west they should set up in order to view the eclipse early in the day of May 10, 1994.

MIR

While in California recently, Rex N7NGM learned from John, N6DD that the cosmonauts are due to return March 25th. This information was obtained after John's brief contact with U5MIR one clear morning in January. The space station's pass was visible to the naked eye. John indicated that the cosmonauts have been heard on 145.5 through 145.6 MHz simplex and sometimes have made unannounced contacts via repeaters as they orbited overhead. Apparently they have two radios because others have reported hearing them on 145.6 while the packet station continued to operate on 145.55 MHz.

EDITORS

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1992 YARC Calendar of Events

<p>January 16th at 1900</p> <p><u>REGULAR MEETING</u></p> <p>PRESENTATION by Steve Elliot</p> <p><u>"GOSSOMER ALBATROSS"</u> -Flight Across The English Channel-</p> <p>AMATEUR RADIO TESTING IS HELD EVERY <u>THREE MONTHS</u></p> <p>OUR NEXT OPPORTUNITY IS: <u>SAT FEB 8th</u></p>	<p>February 20th at 1900</p> <p><u>REGULAR MEETING</u></p> <p>PRESENTATION by Leonard Beers KB7FRV</p> <p><u>"AVIATION COMMUNICATIONS"</u></p> <p>An aerial insight of what really happens inside the cockpit of a high tech jet. <u>REMEMBER-</u> Lenny presented "<u>FLIGHT SIMULATORS</u>" in Oct and people are still talking about it.</p>	<p>March 19th at 1900</p> <p><u>REGULAR MEETING</u></p> <p>PRESENTATION by Kim GORDON</p> <p><u>"AMERICAN RADIO EMERGENCY SERVICE"</u></p> <p>Better known as <u>ARES</u> SPONSORED BY ARRL.</p> <p>A necessary Public service - let's listen then join.</p>
<p>April 16th at 1900</p> <p><u>REGULAR MEETING</u></p> <p>PRESENTATION by Jim Helmericks AA7GP</p> <p><u>"LIGHTNING"</u></p> <p>Creates havoc every year with our precious electronics; so let's learn how to prevent some of it.</p> <p>REMEMBER-- it's UPGRADE time... <u>SAT MAY 19th</u></p>	<p>May 21st at 1900</p> <p><u>REGULAR MEETING</u></p> <p>PRESENTATION by Hank Riviere W4ZBP</p> <p><u>"FIELD DAY'S & FM RADIO"</u></p> <p>Don't miss this one!! It's your introduction to FIELD DAY in JUNE.</p> <p>AMATEUR RADIO TEST- <u>SAT MAY 9th UPGRADE??</u></p>	<p>JUNE 18th at 1900</p> <p><u>REGULAR MEETING</u></p> <p>Final Discussions and Planning before:</p> <p><u>FIELD DAY</u></p> <p>June 27-28 Start 1100 (overnight)</p> <p><u>HERITAGE PARK WEST</u> FOOD-BIG FUN <u>LET'S GET IT TOGETHER!!!!</u></p> <p>CWH</p>