Marine Communications
by Dan Withers WM7W – Port Ludlow, WA

Amateur Radio and the internet continue to merge features that make communications more fun.

This month we will explore one of the most popular applications that use the internet to extend our normal communications networks. That is the **Internet Radio Linking Project (IRLP).**

IRLP is designed to provide the amateur with communications around the world by linking repeaters together through the internet. Much effort has been given to providing a high quality audio connection. At a recent ARC meeting, SYC member Garth Hitchens (KG7GA) gave a demonstration of this system and we had a 10 minute QSO (radio conversation) with an amateur sitting in his pickup at a jobsite in Australia. We were operating from the Heritage Room with a low power handheld radio to a repeater on Queen Anne Hill.

In the West we have an organized network called the Western Intertie Network or the WIN System (winsystem.org). They have done a great job of providing software and hardware standardization so that nodes will operate consistently with the best sounding audio possible.

If you have a 2meter/440mhz hand held or mobile radio you too can connect (or listen) to repeaters around the world using the following information.

Determine the local IRLP equipped repeater to a monitor, a few local ones are on this list. You may find that just listening is fun. You never know where someone else is connecting to. *(ITS on this chart is the **Island Trunk System,** a network of repeaters connected in BC.)*

Call	Location	Freq	Tone	IRLP
KE7FZX	Bellevue	446.575 +	103.5	3992
WW7SEA	Downtown	444.550 +	141.3	7795
K7LWH	Eastside	145.49 -	103.5	3978
WA7UHF	Seattle	442.875 +	141.3	3330
WW7SEA	Queen Anne	444.700 +	103.5	7378
K7CPR	Olympia	145.47 -	100.0	3062
VA7RS	Nanaimo/ITS	444.725+	141.3	1755
VE7DJA	Nanaimo/ITS	145.43 -	141.3	

Now that you have found a local repeater to connect to you must determine the destination that you want to connect to. This is done by picking a location from the list at www.irlp.net at *Node Information.*

If you have Google Earth loaded you can look at the earth and see all of the nodes and the current link status of each connection in existence around the world. This URL is long and can be found at the IRLP site. At the *Listen Live* button you can select many stations that you can monitor from your desktop too.
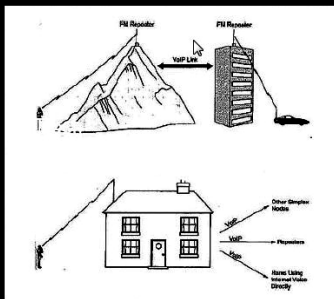
If you are ready to connect to a node somewhere consider this list of instructions for making the connection.
- Locate a repeater with IRLP access
- Determine the IRLP node or reflector to call
- Listen to the chosen repeater for 15 seconds then ask, "Is this repeater in use?"
- PTT (push to talk), wait 2 seconds, announce your call, node# you're calling, then key in the node# via the DTMF pad.
- The called node will confirm your connection audibly.
- Wait 15 seconds for clear traffic, then call CQ or the specific station.
- When done, announce your call and say "dropping IRLP" and enter 73 via the DTMF pad.

Of interest to boaters is that IRLP is available throughout the ITS at 146.640Mhz – IRLP Node #1003 and 444.725Mhz – IRLP Node #1755 ✿