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How to Become an
ISS APRS Gateway

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ISS APRS Gateway

Receiving, Decoding and
Uploading APRS Transmis-
sions from the ISS
By Christopher Friesen VE4CWF

The International Space Station (ISS) is outfitted with amateur radio transceivers as part of the Amateur Radio on the International Space Station (ARISS) program. The ISS crew always have licensed operators onboard, but crew members on the ISS don’t regularly operate these stations. Instead, they use them for making carefully planned school contacts or, on a few random occasions, they might make direct contact with a handful of lucky hams.

But, amateur radio on the ISS offers more opportunities for all radio hobbyists because, even though crew members don’t use the amateur radio stations very frequently, the equipment is almost always turned on.

One such activity involves transmitting Automatic Packet Reporting System (APRS) packets through the ISS’s on-board APRS digipeater. The problem is that there aren’t enough ground stations listening in on the activity. As a result, much of the North American land mass remains an ARISS radio dead-zone. Christopher shows you how to help by turning your own station into a Gateway for ISS repeater operations.

On Our Cover
Back-dropped by Earth’s horizon and the blackness of space, the International Space Station is featured in this image photographed by an STS-134 crew member on the space shuttle Endeavour after the station and shuttle began their post-undocking relative separation on May 29, 2011. (Photo credit: NASA)

Urban Monitoring: The Trials and Tribulations of a Cliff Dweller

By John Maikisch K2AZ

Until a few years ago, John Maikisch enjoyed the use of a radio shack that included a 75 foot tower hung with beams covering all ham bands from 40 meters to 70 centimeters, with enough property to stretch out an inverted-L with 128 full-sized radials for 160 and 80 meters.

Then he moved to a six-story apartment complex with zero property for wires and no room for beams. While many hams might have thrown in the towel, John simply pressed on. He shows us all what it takes to hear and be heard from “the cliff”

Watch International TV on ROKU

By John Biggs

Prior to the advent of Internet streaming, if you wanted to watch international TV programming, you had to set up a C or Ku-band satellite dish, but no longer. If you have a Roku box connected to your TV, you have a portal to television from all over the world! John shows us how, with your existing WiFi connection, you can also gain access to “private channels” and be viewing programming from BBC World Service, Deutsche Welle-TV and many more from just about every corner of the world!

2013 Dayton Hamvention®:
A Glimpse into the (Open) Future of Radio

By Thomas Witherspoon K4SWL

While every Hamvention has common threads; an active flea market, new product announcements, fascinating forums and, of course, questionable spring weather, this year Dayton presented three distinct themes which might just mark new trends in our ever-evolving radio hobby.

CommRadio CR-1

By Thomas Witherspoon K4SWL

The introduction of a new desktop shortwave radio today is a big deal and Thomas Witherspoon highlights the many attributes of this tough, small, but capable receiver. With longwave, medium wave, shortwave, VHF and UHF coverage (and loads of extras), find out why Thomas says, “The CommRadio CR-1 might just be the perfect radio for DXers who like to travel.”
AR6000 Professional Grade
40 kHz ~ 6 GHz Wide Range Receiver

Continuous Coverage
That Goes Far Beyond!

The AR6000 delivers continuous tuning from 40 kilohertz to 6 gigahertz in a wide variety of modes for professional monitoring performance that’s nothing short of amazing in terms of accuracy, sensitivity and speed. Standard modes include AM, FM, WFM, FM Stereo, USB, LSB and CW. An optional module can add the capability to receive APCO25 digital communications plus an optional I/Q output can be added to capture up to one megahertz of bandwidth onto a storage device for later listening or signal analysis.

Designed for the monitoring or technical service professional, there are no interruptions in the AR6000’s tuning range. With exceptional tuning accuracy and sensitivity throughout its tuning range, the AR6000 begins at the floor of the radio spectrum and continues up through microwave frequencies so it can be used for land-based or satellite communications. It works as a measuring receiver for those seeking a reliable frequency and signal strength standard. To support its broad spectrum, the AR6000 has two antenna ports, with the added capability of an optional remote antenna selector from the front panel of the receiver.

With its popular analog signal strength meter and large easy-to-read digital spectrum display, the AR6000 is destined to become the new choice of federal, state and local law enforcement agencies, the military, emergency managers, diplomatic service, lab technicians, news-gathering operations and security professionals.

Available in the US only to qualified purchasers with documentation. Specifications subject to change without notice or obligation.
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  leased.

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monitoringtimes.com. By postal mail, you may write them in care of MT Headquarters in
Brasstown. Please enclose a self-addressed, stamped envelope if you wish the columnist to reply.