Dxers Unlimited mid-week edition for 17 November 2015



By Arnie Coro, radio amateur CO2KK

Hi amigos radioaficionados all around the world, now listening to this middle of the week edition of your favorite radio hobby program... Yes, this is Dxers Unlimited coming to you from Radio Havana Cuba, via short wave and also available from our website www.radiohc.cu providing streaming audio at the proper bitrate for easy listening. Solar flux hovering around 100 units, and the A Index, planetary geomagnetic disturbance indicate above normal at near 15 units.

I am your host Arnie Coro, and here is item one of today's show... Excellent night time HF propagation conditions observed Monday evening local time here in La Habana, Cuba....The 40 meters amateur band was particularly good until sunrise and I observed similarly good conditions on the 49 and 60 meters broadcast bands.... Typical autumn to winter transition propagation conditions are now showing up every day starting at about an hour before your local sunset... The very significant propagation enhancement is related to a very well known characteristic of the ionosphere at the end of the equinoctial periods... especially from autumn to winter. What is happening after local sunset is that the ionosphere is responding better to the impact of solar ultra violet radiation reaching it from the SUN, so the number of free electrons per cubic centimeter increases... as the free electrons at the height of the F layer increase, the maximum usable frequency also increases, and that is what is actually happening. Let me tell you about recent examples of this typical enhancement that happens from about two weeks before and two to

three weeks after the Autumn equinox of our hemisphere and the spring equinox of the southern hemisphere... My good friend CO2JA professor Jose Amador a well known Cuban radio amateur and telecommunications engineering professor made a phone call during the weekend to tell me about how he had worked many European and Middle East stations on the 20 meters band starting just after sunset and until very late in the evening local time here in Havana. Following his tip, I began to operate with my 5 Watts output single side band transceiver, monitoring the 40 meters band very near local midnight, that is from 0400 UTC, and sure enough staying up late was rewarded with several very nice contacts, while running the very low power station. A quick check with the general coverage receiver showed that the 49 and the 31 meters international short wave broadcast bands were open with stations from across the Atlantic So here is now my advice... stay up late and if you are an amateur radio operator that finds the 20, 17 and 15 meters bands with no signals, do what I did late Sunday and start calling CQ DX on 40 and 80 meters ... you will soon find out that the ever growing problem of lack of activity on the amateur bands was the cause of very few or no stations heard... As a good friend of mine likes to say, he has been able to work some of the most challenging DX expeditions while calling CQ DX on what apparently was a dead, apparently totally unoccupied band that was actually wide open for long distance propagation...

Item two: the amateur radio academy tests takes place in many of the Cuban provinces twice every year during a weekend so that everyone can participate. Radio amateurs here in Cuba provide much needed communications from isolated spots whenever they are required due to bad weather ,for example when rivers well above their flood stage levels cut land links with the respective provincial capitals as it happens when torrential rainfall from hurricanes impact our territory.

Whenever a tropical cyclone or hurricane approaches, hundreds of Cuban radio amateurs are on the emergency nets with stations on the 2 meters band , while a lesser number go on the air using the 40 meters band during the daytime and 80 meters at night. Now we are adding the new 55 meters band allocation that spans from 5418 to 5430 kilohertz, a very narrow 12 kilohertz band that is proving to be very effective using Near Vertical Incidence Skywave communications .

During the month of May every year the annual Meteoro emergency drill takes place.

The excellent coordination between the provincial radio clubs, the municipal base clubs and the national and provincial Civil Defense Agency is well known, making excellent use of the available resources, both in manpower and equipment. Amateur radio shows how it is capable of deploying stations at even the most difficult to reach places, and once there, the ability to transmit all emergency traffic using the locally available resources like standby electric generators, solar panels and wind power chargers.

Item three of the middle of the week edition of Dxers Unlimited coming up in a few seconds after a short break for a station ID. I am Arnie Coro in Havana, and our e/mail address is inforhc@enet.cu...

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This is Radio Havana Cuba... you are listening to Dxers Unlimited and here is QSL on the air to amigo Diego Romero who reports regularly from California, where he listens via short wave on our 6100 kilohertz frequency and also picks up our streaming audio from www.radiohc.cu....... When propagation conditions are really good, there is little or almost none man made interference and activity on the amateur bands is not high, one can make excellent DX contacts using a low power station... Just to give you an example, early Monday UTC day I was able to work stations in South Africa and the Reunion archipelago while running just 5 Watts to a wire antenna... OK, I agree that propagation conditions were excellent and that there was no QRM or QRN, but nevertheless it is quite interesting to see how a QRP or low power amateur radio station with a very simple sloping half wave dipole antenna can provide excellent two way contacts at distances of several thousand miles while running very little power

Now item five: Our most popular part of the show... YOU have questions and I try to answer them as soon as possible, directly to your e-mail address and also on the air ... our popular QSL on the air section of

Dxers Unlimited will be answering a question sent by listener Bryan o from London, Ontario, , Canada... Bryan wants to know why his radio reception on the short wave bands becomes quite noisy when it is snowing... He also adds that depending on the type of snow, the disturbance to short wave radio reception , what experts describe as precipitation static noise sounds differently ... and I may add that it disappears as soon as it stops snowing....here in the tropics where I live, the precipitation static noise happens when it is raining at a high rateI understand the the snow induced noise is much higher than the noise generated by a local heavy rainfall...

And now amigos, as always at the end of the show when I am here in Havana, ready to copy ... Arnie Coro's HF propagation update and forecast. Expect sporadic E layer openings at middle latitudes, and possible propagation disturbances at latitudes above 40 degrees North. The tropics will continue to provide good propagation and much lower noise levels as the summer thunderstorm season came to an end.

Send your signal reports and comments to inforhc@enet.cu of Via Air Mail to Arnie Coro, Radio Havana Cuba, Havana, Cuba....

 $\frac{https://www.radiohc.cu/index.php/en/noticias/ciencias/76145-dxers-unlimited-mid-week-edition-for-17-november-2015$



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