

REAL WORLD EXPERIENCE & OBSERVATIONS ACTIVATING A RARE STATE ON IO-117

USING THE MULTI CALL RARE ACTIVATION MODE

ON GREENCUBE TERMINAL BY OZ9AAR

WC7WB

WYOMING

1. I am unaware of any Wyoming stations on IO-117 so being 42 miles from the state line I did a portable one pass operation to test out the Multi Call function.
2. I familiarized myself with it as much as possible using the INJECT function available in the program. Click in the Traffic window anywhere and hit “j” on the key board and a small window is brought up that you can have fake stations calling you and they will be placed in your Calling Me window and then practice CTL double Clicking or Shift Clicking and sending and logging them.
3. **TLE data:** There is an ability to use a local tle.txt file on your laptop for the program to use. If you do not do this and are out of WiFi or cellular range then the program cannot provide elevation and pass data of other stations calling you. I found out the hard way just before the pass began as I had not considered this previously. Fortunately I had one bar of LTE service on my 5G cell phone and was able to momentarily set up a hot spot from the phone to download a TLE file. When the laptop connected I had about 15 seconds to open the program and have it connect and down load the current tle.txt file before the hot spot was lost so that data was available during the pass. **Lesson Learned: When going portable I suggest enabling “Use local TLE data” in the TLE data tab of the settings menu and then download a TLE file and place it in your Documents/Greencube folder BEFORE the activation.** That can be updated before each portable operation if needed.

3. Less than 10 minutes into the pass I felt comfortable using the system.
4. **You have to get comfortable in logging a station when your final transmission goes out over the digipeater and you see your transmission come back to you. LOG THE CALLS AND MOVE ONTO THE NEXT CALL(s). Trust that if it wasn't copied by anybody in the list of stations sent to they will call back and they will end up in your Calling Me window again.**
5. Have you ever made one FT8 or CW contact with a DXpedition station and find out later in Club Log they have you logged three times? It's no big deal, **it's the one matching QSO that matters.**
6. **How did it work?** I logged 77 contacts, 18 of them were duplicate logged contacts from 8 stations. Those eight stations did not get my initial confirmation transmission and ended up back in my Calling Me window to be worked again, some of them were logged up to three times before they were able to copy my confirmation transmission. The point is **they were not missed** and eventually confirmed on both sides.
7. I also discovered that while sending a confirmation transmission to two stations and not hitting the digipeater a couple of times another new call would show up in my Calling Me window. **I was able to CTL double click on that new station and it would be added to the current outgoing call list so two calls has now become three calls.** I did have one transmission with five calls in it. Once I hit the digipeater all but one of the stations copied it and later that one station called back in and made my Calling Me window again and was eventually confirmed.
8. **How did we do?** 59 non dupe contacts, 20 DXCC entities from Asia to NA to the Caribbean to Europe. **This was all done in a single 1 hour and 5 minute pass.**
9. **Setup:** IC-9700 @ 75 watts, M2 70cm Leo Pack antenna 10.3 dB gain, M2 Polarized switching driven element to switch from RHP to LHP when fading occurs, Green Heron Rotor controller with Yaesu G5500 DC rotor AZ/EL, WiMo tripod, Honda 1000i generator, Astron 25amp power supply, aVIAO Laptop with a clear horizon during the entire pass from 270 degrees to near 90 degrees. RF was going out over the prairie grass of South Eastern Wyoming, **DN71oa62.**

UNDERSTANDING AND USING THE MULTI CALL RARE ACTIVATION MODE

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Anyone using IO-117 and activating a rare entity such as a rare US State, A foreign DXCC entity or rare Grid that has been under represented on IO-117 to date should consider using **the Multi Call mode** for operation. Think of it as the “Fox/Hound” Mode for IO-117 digipeater use. The goal of a rare activation is to make contacts and that’s why DXpeditions use it on FT8 because it’s an efficient way to verify copy of more than one signal at a time.

We all know every Sat Pass is different in our ability to hit and copy the digipeater. Why would you send five or more transmission to finally get your signal sent out on the digipeater to one station when you can send it out for two, three, four or more? You’ve just potentially quadrupled your output or more with one successful digipeat. I say potentially because some people on that digipeat call list may not copy it for a few different reasons that we are all aware of. With that “problem” in mind the Multi Call Rare Activation Mode handles that issue quite nicely.

In the Program Settings menu under the General Tab you can Enable Multi Call. There is one other thing to consider, when you log a call from the Calling Me window on the top right that station will not show up again in your Calling Me window by a default setting UNLESS you go to the Logging Tab of the Program Menu Settings and UNCLICK the box “Do not insert call into CallingMe again after logging”. Basically what this does for you when you UNCLICK it is that it allows a station that did not get your RR73 In The Log transmission to call you again and get back into your Calling Me window. Someone that got the transmission and sends a **RR73 TU Have a Lovely Day Good Luck LoTW eQSL ClubLog In the Log** will not get back in the window. **Remember anybody in the Calling Me window has either called you for the first time or is calling you again because they did not copy your RR73 transmission when you logged them**

before. IF THEY ARE IN YOUR CALLING ME WINDOW THEY NEED TO HAVE A CONFIRMATION TRANSMISSION SENT even if you sent one before.

The Calling Me window: What a brilliant concept! **Rare activations will spend most of their time and focus on the Calling Me window.** When a lot of stations are calling you it's really hard to rapidly assess the Traffic Window so one focuses on the Calling Me box where all calls directed to you go. They are sequenced by those leaving the satellite footprint first and they will be at the top. Positions constantly change as calls come in but the only way to get rid of a call in the Calling Me box is to work them and log them. When logged they disappear, If they didn't copy you then they will show up again if they call again with their report and grid.

The Calling Me window is also where you double Click to place a station in the To Box for a QSO Confirmation transmission. It is also where you **CTL double Click to highlight multiple stations** in the box to send multiple stations at once a confirmation transmission. As you control click a station it will appear in the TO BOX but will be replaced by the next CTL double Click station. You won't see them all at once in the TO BOX until you send the transmission. Perhaps a simpler way is to highlight stations for a multiple transmission by using the **SHIFT key to highlight a group**. Say you have 8 stations in your Calling Me window. You know that top four will be leaving the satellite footprint first so if you hold down the Shift key and click on the top call to highlight it then click on the fourth call at which point all four calls will be highlighted. While still holding down the SHIFT key double click on the fourth highlighted call and all four calls will be added to the TO list to be confirmed. **All selected stations to be sent a confirmation transmission will be highlighted in the Calling Me box and will remain highlighted until you log them all simultaneously with a right click and log command.** You will see the calls you are logging when you right click the highlighted calls before you log them.

One should really practice with the INJECT feature before going live the first time.

Personally I think this could be used on a smaller scale during daily IO-117 use. When you are having trouble hitting the digipeater and two stations have called you why not answer them both at once? After all we are amateur radio operators and we know how to multi task... i.e. Multi Call.

GOOD LUCK AND SEE YOU ON IO-117 FROM WHO KNOWS
WHERE NEXT???