

Detailed Pinpoint & VARA FM beaconing position examples by KH7O 10/17/21

MYCALL-SSID can be just a call sign without SSID

5A) Example: to digipeat through WH7MN DIGIPEATER
 you enter WH7MN-0 in your Pinpoint APRS PATH
Alternative: if WH7MN-3 was in the DIGIPEATER side settings of (VARA/setup\ Digipeater) you would enter WH7MN-3 in this APRS PATH

5B) Example: To beacon through 2 digipeaters Maunakapu then thru Maui
 you would put this in APRS path (KH6CE-0,WH6FXV-0)
 "note the comma after KH6CE-0 and no space between comma and WH6FXV-0"

5C) Example : To beacon out just from QTH
 use drop down menu and pick any WIDE path or put in any call sign **with a SSID** .(cannot be blank or will not beacon at all)
 keep in mind Pinpoint is only used to create a beacon sentence formatted in APRS language that is moved to a receiving station in range that Pinpoint can understand and map out your position ICON.

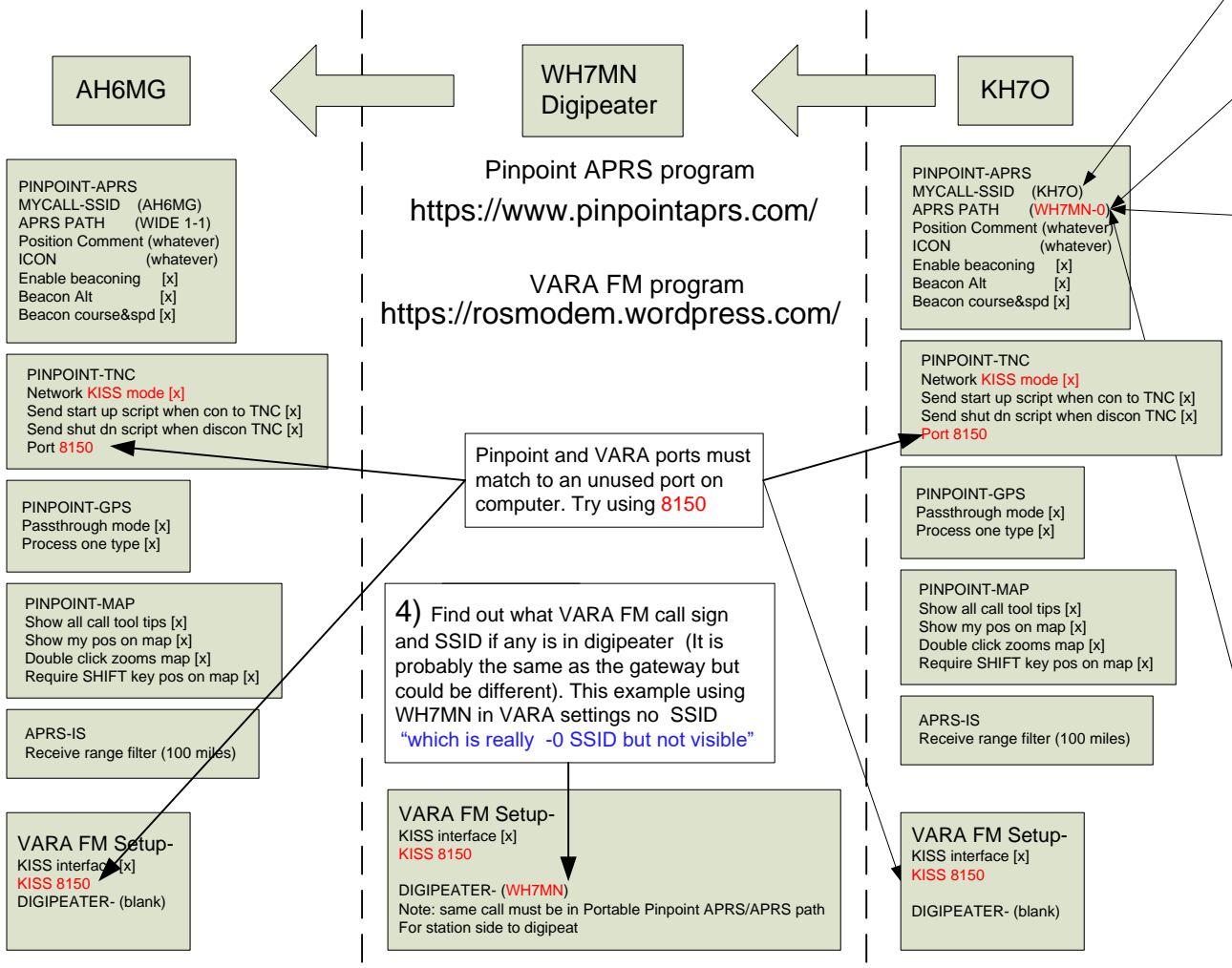
The beacon sentence (all the characters that make up the beacon string) is burped out to open air without a destination.

"VARA and Pinpoint APRS communicate like a traveler in a foreign Country where neither understands each's language except for a word or two here and there"

VARA in KISS mode is simply repeating what it hears through a pipe , VARA only hears and speaks VARA, Pinpoint only speaks APRS.. Occasionally they both understand each other when things are spelled out like when the SSID is included in Pinpoints "APRS Path" and is talking then VARA can understand clearly what Pinpoint is saying regarding the path. Other than that VARA hears and can speak exactly what it hears but does not understand APRS language..

(Short note about APRS language. A lot more to this but a APRS digipeater is intelligent and interactive with each beacon it hears stripping off a hop count one less as it pass through and editing the beacon header with count info for the next APRS digi /station to do the same or at the end not continue the beacon train. In short that creates a radius "follow me" of the initial beacon position as you move. APRS understands the WIDE and other APRS specific commands along with conventional packet commands. APRS is an enhanced version of Packet but not meant to move traffic just short beacons of many types or tactical message by conventional routing or APRS automatic routing without designating a path.)

NOTE:as explained above in 5A the SSID -0 was added and matches the call of the digipeater



4) Find out what VARA FM call sign and SSID if any is in digipeater (It is probably the same as the gateway but could be different). This example using WH7MN in VARA settings no SSID "which is really -0 SSID but not visible"

VARA FM Setup-
 KISS interface [x]
 KISS 8150
DIGIPEATER- (WH7MN)
 Note: same call must be in Portable Pinpoint APRS/APRS path
 For station side to digipeat

Follow these steps:

- 1) put mouse on QTH on Pinpoint map (**zoom as needed**)
- 2) [SHIFT]+ click
- 3) Pinpoint **popup will appear**
 Add Waypoint
 Set As My Position (**select**)



EXAMPLES OF KH7O ATTEMPTING TO BEACON
 BELOW ARE RESPECTIVE PINPOINT MYCALL & APRS PATH SETTINGS

AH6MG	KH7O
AH6MG/WIDE 1-1	←-----NO BEACON-----KH7O/AH6MG
AH6MG/WIDE 1-1	←-----NO BEACON-----KH7O/KH6ABC
AH6MG/WIDE 1-1	←-----NO BEACON-----KH7O/WH7MN
AH6MG/WIDE 1-1	←-----GOOD BEACON & DIGIPEAT-----KH7O/WH7MN-0
AH6MG/WIDE 1-1	←-----GOOD BEACON-----KH7O/WH7MN-1
AH6MG/WIDE 1-1	←-----GOOD BEACON-----KH7O/AH6MG-0
AH6MG/WIDE 1-1	←-----GOOD BEACON-----KH7O/AH6MG-1
AH6MG/WIDE 1-1	←-----GOOD BEACON-----KH7O/KH6ABC-1
AH6MG/WIDE 1-1	←-----GOOD BEACON-----KH7O/WIDE 1-1

NOTE:as explained above in 5A the SSID -0 was added and matches the call of the digipeater

Graphic Guide -Pinpoint APRS with VARA FM setup by KH6ML 10/12/21

KISS TCP Port must match
And cannot be the same as
Another program running

* VARA FM WIDE needs a FM rig set for 9600 Packet operation, with a special soundcard interface (6 kHz BW) connected to rear panel: RA-Board, Signalink "Black" transforms, Modified Signalink (red audio transforms removed), homebrew interface (a simple direct cable)...

* In other case, you must select VARA FM NARROW

Example: To Beacon through 2 digipeaters KH6CE-0 atop Maunakapu and KH6RX-0 in Kailua you would put this in APRS path
KH6CE-0,KH6RX-0
 (note the comma with no spaces)

Then any users station that can hear at least one of the two will receive and display the APRS MSG or Position Report