

**TESTING ENCRPTION WITH RADTEL RT490, MML8629 AND BAOFENG UV-5R**

**LESSON 1:** EncryptedPrivacy 2-way communication requires all participating parties in the group to have the same setup combination of options as follows:

- A) Same Encry (1,2,3 or 4) PLUS
- B) Same usage of a Custom Privacy Code
  - 1) either all DO NOT USE a Privacy Code and have blank as Privacy Code
  - 2) OR all use the same 6 character custom code)
- C) If using a Custom Privacy Code, all must also Enable Privacy Code as DCS

**LESSON 2:** Privacy Codes can be used without using Encryption to restrict 2-way comm to the group so long as the communicating parties are setup as follows:

- A) Everyone does not select Encry1,2,3 or 4 (basically Off)
- B) Same usage of a Custom Privacy Code with all using the same 6 character code
- C) IAll must also Enable Privacy Code as DCS

**LESSON 3:** As previously tested, any radio with No encryption and no codes can listen in on a Frequency channel whose participants are using Encryption...BUT they can only hear and not talk

**LESSON 4:** Lastly, any radio that is using a mis-matched Privacy code will not be able to talk or listen to other radios that are on the same Frequency but using a different code, EVEN if they have the same Encry level set.

**Other notes:** If radios have a Privacy Code entered, but NOT Enabled, the Privacy Code does nothing, it does not update DCS and does not interfere with 2-way comm is successful.

	Result	Encrypt ON	Learn Enabled	Code	Populated DCS
<b>CASE 4 - RAD &amp; MLL have SAME Encry2, SAME Code, SAME Learn ON</b>					
Radtel 490	2wayYes	Yes	Yes	ABC123	Yes
MML8629	2wayYes	Yes	Yes	ABC123	Yes
Baofeng UV-5r	Hear Only	N/A	N/A	N/A	N/A
Rad and MLL match Enc2 & codes, 2 way comm yes					
Bao with no encryption, codes or learn was able to hear everything but can't talk back					

<b>CASE 5 - Rad &amp; MLL have SAME Encry2, NO code, Learn is OFF</b>					
Radtel 490	2wayYes	Yes	No	blank	n/a
MML8629	2wayYes	Yes	No	blank	n/a
Baofeng UV-5r	Hear Only	N/A	N/A	N/A	N/A
Rad and MLL match Enc2, Code blank (which turned Learn OFF) Yes hear and talk to each other					
Bao with no encryption, codes or learn was able to hear everything but can't talk back					

<b>CASE 6 - Rad &amp; MLL have SAME Encry1, Mismatch Codes, Learn is ON</b>					
Radtel 490	Silent	Yes	Yes	ABC123	Yes
MML8629	Silent	Yes	Yes	07B07B	Yes
Baofeng UV-5r	Hear Only	N/A	N/A	N/A	N/A
Rad and MLL with NOT matched codes, Encry1 both, could not hear or talk to each other					
Rad and ML could also not hear or talk to Bao					
Bao could hear both MLL and RAD, but not talk back to either					

<b>CASE 7 - Rad &amp; MLL have NO Encry1, Match Codes, Learn is ON</b>					
Radtel 490	2wayYes	No	Yes	ABC123	Yes
MML8629	2wayYes	No	Yes	ABC123	Yes
Baofeng UV-5r	Hear Only	N/A	N/A	N/A	N/A
Rad and MLL with Matched codes, Off, 2-way comm good					
Rad and ML could also not hear Bao but Bao heard them					
Note: If a Privacy Code is entered, but NOT enabled, it doesn't do anything, it's harmless					