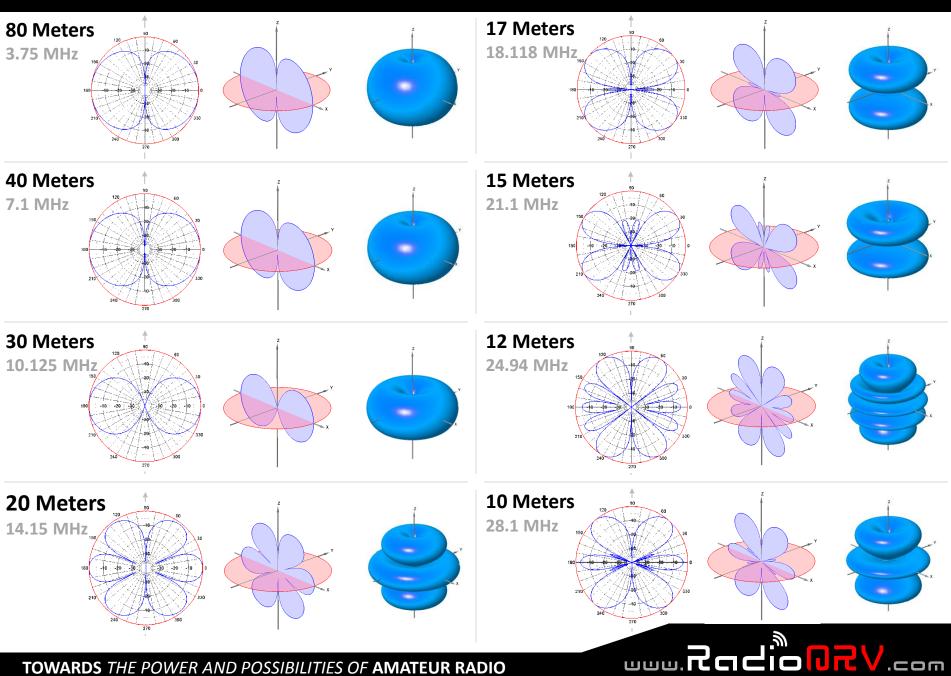
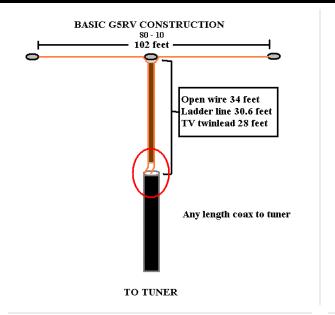
Rev. 22 Jun 2013

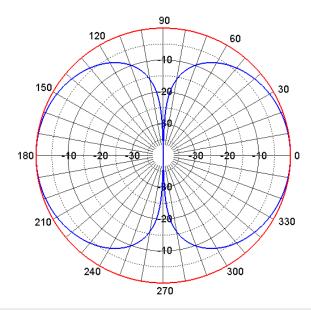
# 80 - IO METERS

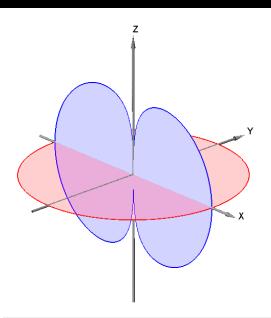


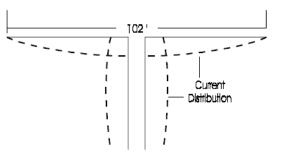
Rev. 22 Jun 2013

#### BO METERS









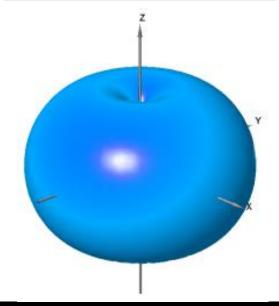
Current Distribution on 80 Meters

#### 80 meter band:

On 80 meters the G5RV functions as a slightly short half-wave dipole. The current distribution of the antenna and matching line is shown in to the left. The horizontal radiation pattern is the same as a half-wave dipole on this band. With horizontal polarization at heights below 100 feet the antenna is practically omnidirectional and has a high takeoff angle.

	3500 KHZ	525	3585	3600	3700	3800		4000	~~
EXTRA	CW & DATA		AUTO DATA			SSB PHONE LSB		j:	80
ADVANCED		CW & DATA	AUTO		••	SSB P	HONE LSB	t i	METERS
GENERAL		CW & DATA	AUTO DATA				SSB PHONE LSB	i.	Best Evenings
TECH&NOVICE		CW 200 WATTS							& Nights

#### TOWARDS THE POWER AND POSSIBILITIES OF AMATEUR RADIO



Rev. 22 Jun 2013

30

60

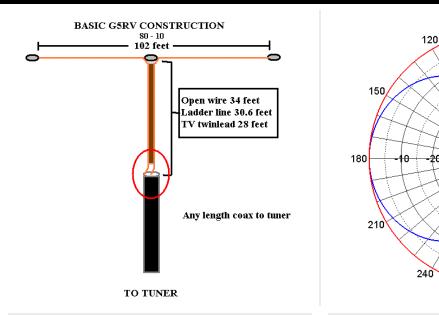
-20-

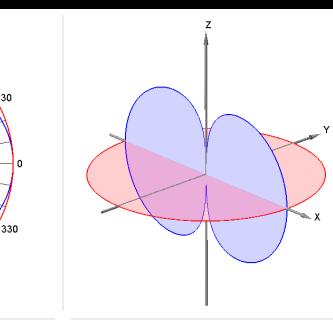
300

10

-30-

#### 40 METERS



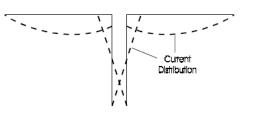


#### 40 meter band:

270

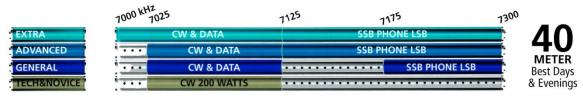
-30

90



**Current Distribution** on 40 Meters

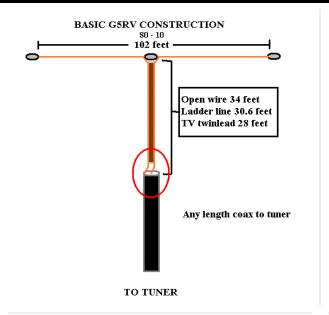
On 40 meters the G5RV functions as "two halfwaves in-phase" fed with a quarter-wave impedance matching transformer. The current distribution of the antenna and transmission line impedance matching section is shown to the left. The horizontal radiation pattern is somewhat narrower than the pattern of a half-wave dipole and is broadside to the radiator on this band. The G5RV has a small amount of gain and radiates at medium wave angles on 40 meters.

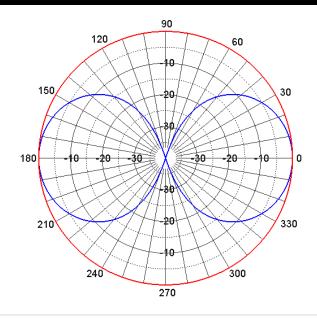


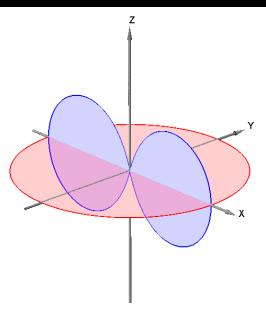


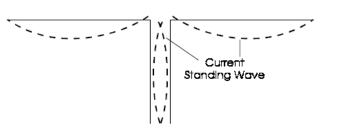
Rev. 22 Jun 2013

# 30 METERS





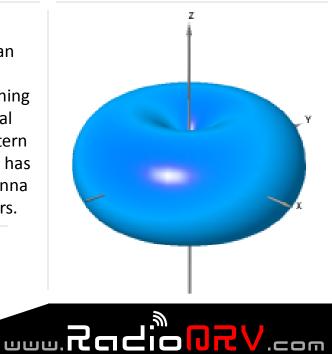




*Current Distribution on 30 Meters* 

#### 30 meter band:

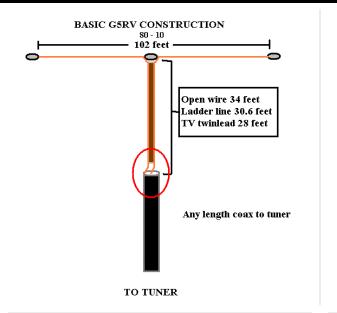
On 30 meters the G5RV functions as an extended double zepp. The current distribution of the antenna and matching line is shown to the left. The horizontal radiation pattern is similar to the pattern of the 40 meter band (broadside) but has four additional minor lobes. The antenna has a gain of around 3 dB on 30 meters.

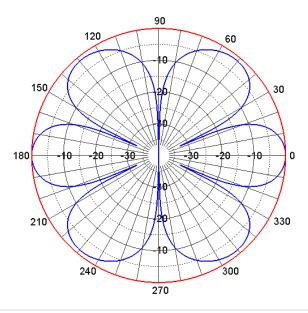


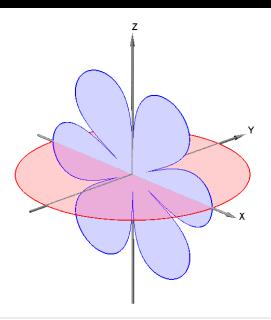


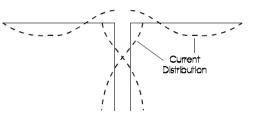
Rev. 22 Jun 2013

#### 20 METERS





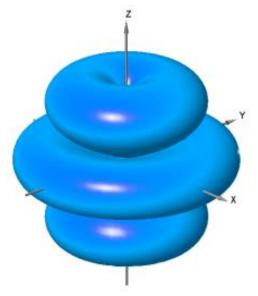


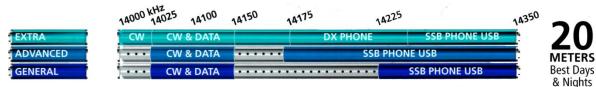


Current Distribution on 20 Meters

#### 20 meter band:

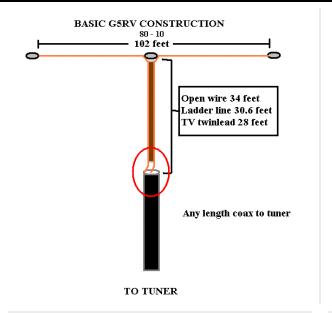
This is the true design frequency of the G5RV. The antenna is a 3/2 wave center-fed antenna and has a multi-lobe pattern on this band. On this band it is a good DX antenna at heights of 30-60 feet. The radiation angle is fairly low. The feedpoint of the antenna is approximately 100 ohms resistive, and the ladder line functions as a 1:1 ratio transformer. See figure to the left for a diagram of current distribution.

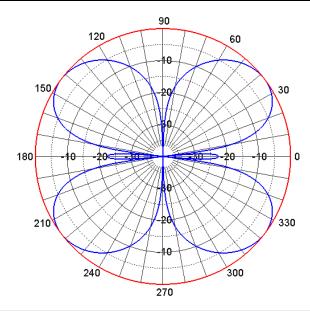


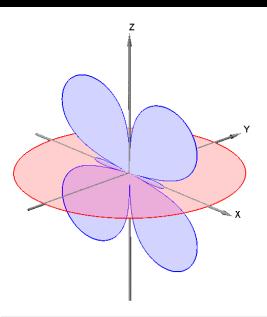


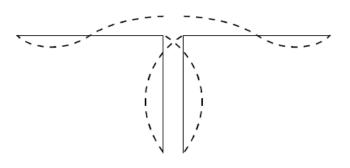
Rev. 22 Jun 2013

# IT METERS





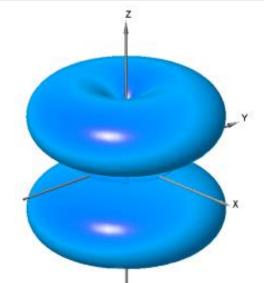


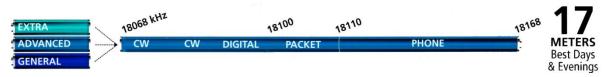


Current Distribution on 17 Meters

#### 17 meter band:

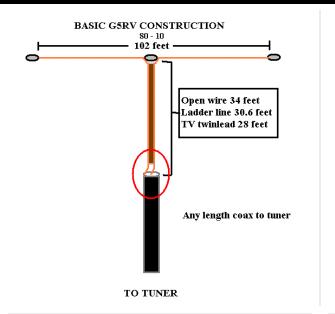
The G5RV is a pair of full-wave antennas fed in-phase on this band. The radiation angle of the antenna is low with many lobes in all directions. The current distribution of the antenna and matching line is shown to the left.

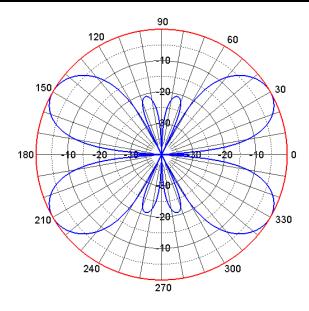


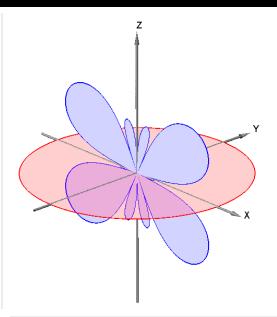


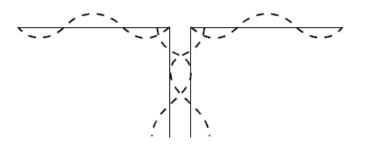
Rev. 22 Jun 2013

### IS METERS





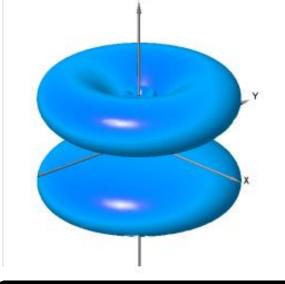


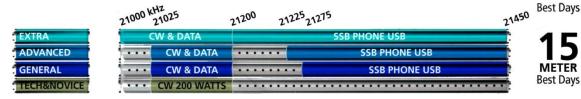


Current Distribution on 15 Meters

#### 15 meter band:

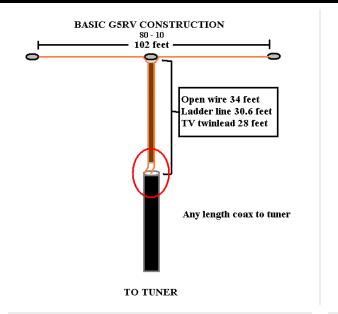
The G5RV is a pair of 1.1 wavelength long wires fed in-phase on this band. This pattern is multilobed in the horizontal plane with a low radiation angle. The current distribution of the antenna and matching line is shown to the left.

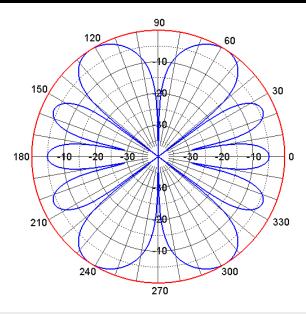


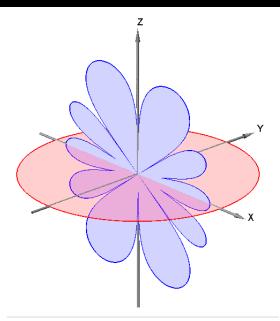


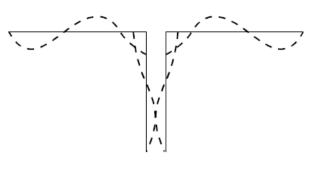
Rev. 22 Jun 2013

### **IS WELESS**







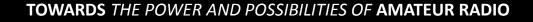


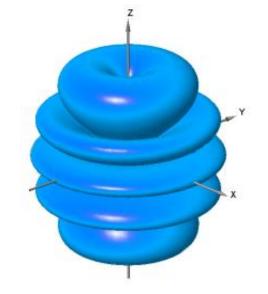
Current Distribution on 12 Meters

#### 12 meter band:

On 12 meters the G5RV is a pair of 1.3 wavelength longwires fed in-phase. The feedpoint resistance is fairly low. The radiation pattern has many lobes and a low radiation angle. The current distribution of the antenna and ladder line is shown in the figure to the left.

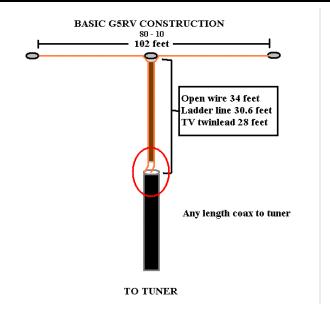


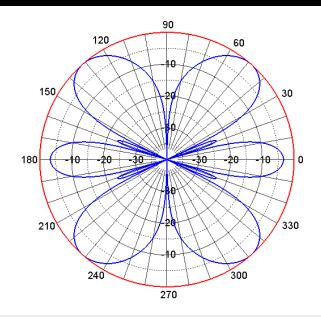


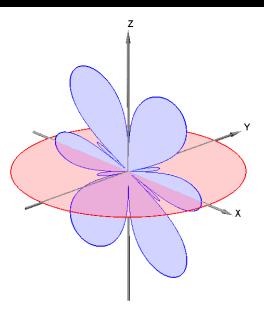


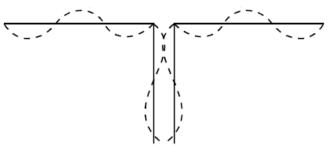
Rev. 22 Jun 2013

# IO METERS





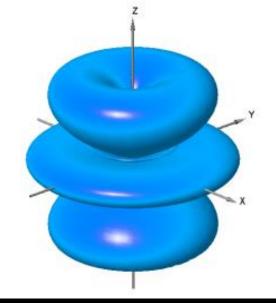




Current Distribution on 10 Meters

#### 10 meter band:

The G5RV functions as two 3/2 wave longwire antennas fed in-phase on this band. The pattern has multiple lobes in all directions. The current distribution of the antenna and matching line is shown in the figure to the left.



	28000 kHz	28200	28300	28500	29300	29600 29700	
EXTRA	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM	10
ADVANCED	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM	IU
GENERAL	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM	METER
TECH&NOVICE	CW & DATA	Beacons	PHONE				Best Days