

Band Plan 2 Meters (144-148 MHz)

144.00-144.05	EME (CW)
144.05-144.10	General CW and weak signals
144.10-144.20	EME and weak-signal SSB
144.200	National calling frequency
144.200-144.275	General SSB operation
144.275-144.300	Propagation beacons
144.30-144.50	New OSCAR subband
144.50-144.60	Linear translator inputs
144.60-144.90	FM repeater inputs
144.90-145.10	Weak signal and FM simplex (145.01,03,05,07,09 are widely used for packet)
145.10-145.20	Linear translator outputs
145.20-145.50	FM repeater outputs
145.50-145.80	Miscellaneous and experimental modes
145.80-146.00	OSCAR subband
146.01-146.37	Repeater inputs
146.40-146.58	Simplex
146.52	National Simplex Calling Frequency
146.61-146.97	Repeater outputs
147.00-147.39	Repeater outputs
147.42-147.57	Simplex
147.60-147.99	Repeater inputs

Notes: The frequency 146.40 MHz is used in some areas as a repeater input. This band plan has been proposed by the ARRL VHF-UHF Advisory Committee.

Michigan uses the 20 kHz simplex channel spacing

2M FM Simplex Frequencies (typical usage, check your local band plan)	
15 kHz Channels	146.400, 146.415, 146.430, 146.445, 146.460, 146.475, 146.490, 146.505, 146.520 , 146.535, 146.550, 146.565, 146.580, 146.595 147.405, 147.420, 147.435, 147.450, 147.465, 147.480, 147.495, 147.510, 147.525, 147.540, 147.555, 147.570, 147.585
20 kHz Channels	146.400, 146.420, 146.440, 146.460, 146.480, 146.500, 146.520 , 146.540, 146.560, 146.580, 146.600 147.400, 147.420, 147.440, 147.460, 147.480, 147.500, 147.520, 147.540, 147.560, 147.580

Practical Signal Reports

an excerpt from

<http://www.hamradioschool.com/practical-signal-reports/>

On VHF FM, signal reports are often given in terms of FM quieting. A strong FM signal is said to “quiet the receiver” since there is virtually no noise present in the received audio. As the signal strength is decreased, noise starts to appear on the received signal. At some signal level, the noise increases dramatically and the signal becomes unreadable. This dramatic increase is called the threshold effect, meaning that FM signals do not gradually fade out, they suddenly crash into the noise. The key idea here is that you want your signal to be strong enough to be above this noise threshold. In terms of a signal report, a strong signal may result in a “full quieting” report. If the signal is less than full quieting, you may hear a report like “90 percent quieting” or “you have about 10% noise”, which both describe the amount of noise present in the signal. If the signal is really noisy, the report might be “50% quieting.”

You will also hear the classic Five Nine signal report on FM, which is basically saying “excellent signal.” While S Meters are often inconsistent on CW/SSB transceivers, they are almost universally poor on FM rigs. Most FM radios just give you an unlabeled bar graph that is only a relative indicator of signal strength. Usually, these are not labeled in terms of S units, so don’t try to interpret them as such. If all of the bars are lit up on your meter, then you might give a report of “your signal is full scale.”

For FM repeater operation, keep in mind that the signal you are receiving is coming from the repeater and not from the other station. So if the other radio ham is fiddling around with his antenna and asking for signal reports, the repeater signal strength is going to remain the same. You may notice that the other station’s signal into the repeater gets more or less noisy, so giving a report on how well he is hitting the repeater is helpful. “Joe, you are full quieting into the repeater.” This is another reason why FM signal reports tend to be in terms of receiver quieting...in linked systems, the signal strength at the transceiver is less important.

One final note is that sometimes the operator on the other end is looking for a more critical evaluation of his signal quality. If he says something about “checking out this new microphone” or “have been working on solving an audio problem”, that may be the clue to spend a little extra time really listening to the signal and providing more comments on how it sounds. For most of us, we don’t actually get to hear our own signal on the air, so it’s very helpful to get quality feedback from other radio amateurs.