

Grid Square EM55 (Memphis, TN area) Propagation Beacons - July 1992

Frequency (MHz)	28.250	50.070	144.280	144.2975	222.055	432.395	902.285	1296.295	2304.215	3456.023
Operator Callsign	N4MW	N4MW	N4MW	N4ZRW	N4MW	W4HHK	N4MW	W4HHK	N4MW	N4MW
Latitude (degrees)	35.1	35.1	35.1	35.3	35.1	35.1	35.1	35.1	35.1	35.1
Longitude (degrees)	90.0	90.0	90.0	89.9	90.0	89.5	90.0	89.5	90.0	90.0
Status	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous	Active Continuous
Mode	CW	CW	CW	CW	CW	CW	CW	CW	CW	FSK
Power (watts)	8	4	4	4 - 0.0625	0.5	10	5	8	4	0.04
EIRP (dBW)	+10	+7	+5	+5 max	-4	+9	+12	+9	+11	-8
Polarization	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Pattern	E/W	E/W	Omni	N/S	Omni	Quad Lobe	Omni	E/W	Omni	Omni
Antenna	Dipole	Dipole	Squalo	Monopole	Dipole	2 wave J	Alford Slot	Horn	Alford slot	Alford slot
Height (meters AGL)	60	60	60	3	60	20	60	20	60	60

W4HHK beacon notes:

Sometimes shut down for station operation, storms, etc.
 Reception reports: PO Box 73, Collierville, TN 38017
 Band opening alerts: Paul W4HHK (901) 853-7373
 W4HHK operates HF, 50, 144, 432 and 2304 MHz

N4MW/N4ZRW beacon notes:

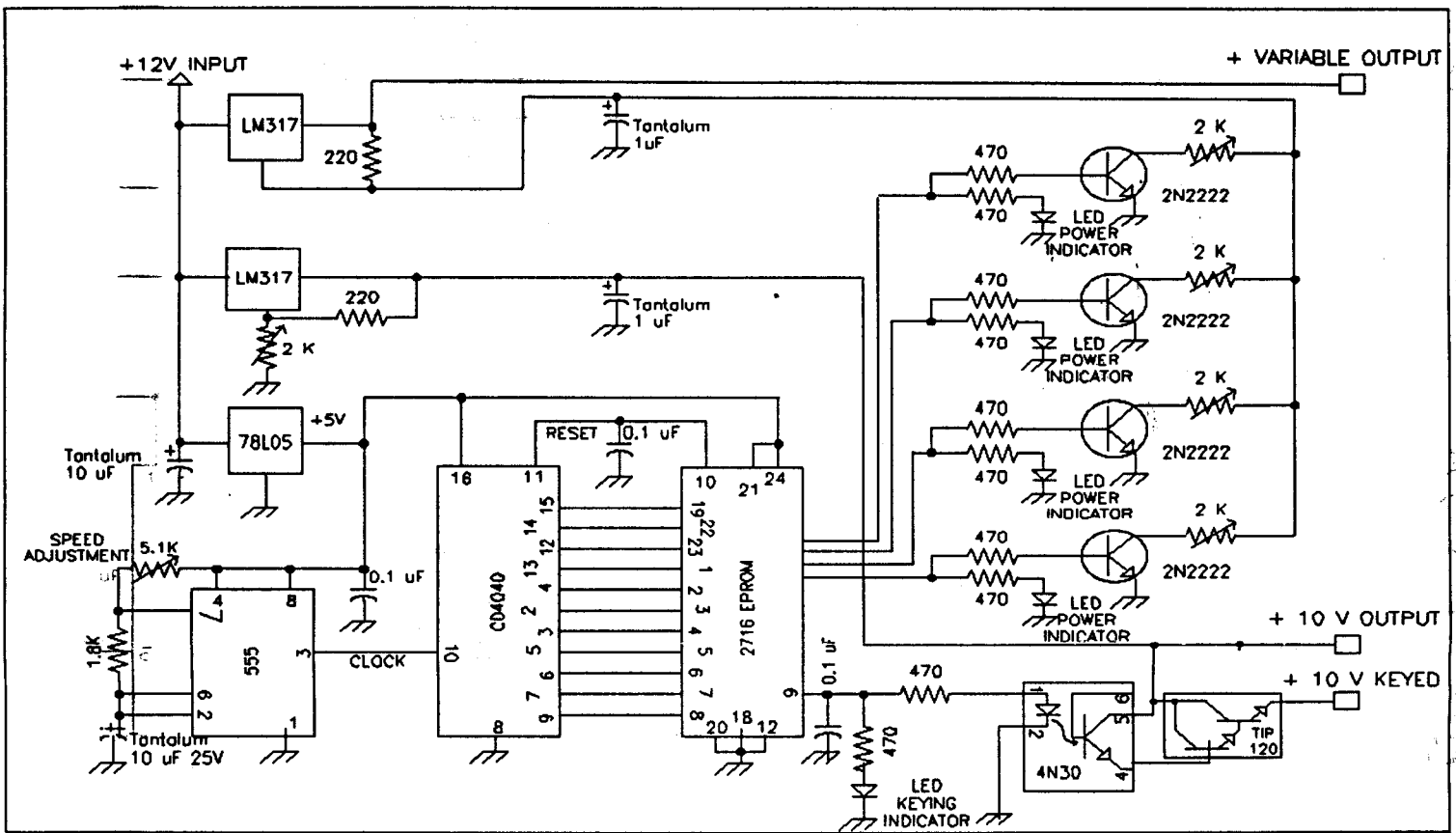
Operation is continuous subject to infrequent power outages and brief control shutdowns.
 Reception reports: 3205 Covington Pike, Memphis, TN 38128
 Band opening alerts: Dave N4MW or Cissy N4ZRW (901) 382-4919
 N4MW and N4ZRW operate all bands through 3456 MHz

Special note:

The N4ZRW 144.2975 MHz beacon is a special multiple power level system. Power varies from 4 to 0.0625 watts in 6 dB steps for a total of four discrete levels. Each level is indicated by the morse message content. Level switching is at 30 second intervals. A complete cycle takes two minutes. This beacon is intended to be received weakly within the local area, and is subject to being moved to an even more remote location if warranted. The N4MW 144.280 MHz beacon should be used for distant reception.

Suggestions to VHF/UHF operators:

Observe each beacon regularly, noting frequencies and received strength. Any changes noticed may be the result of propagation conditions or an indication that system performance has changed. If signals are present which are not normally receivable, get on the air and make some noise. You can call N4MW on the telephone anytime if you need a contact, or if you feel that a band opening alert is warranted. Experience has shown that a directional antenna and higher power can be copied before the beacons are detectable at great distances, so do not wait if other indicators (UHF TV stations, etc.) are unusually strong. If enhanced conditions are suspected, an alert to N4MW allows rapid establishment of an attended temporary beacon using higher power and directional antenna from the home QTH. Also, attended beacon operation can be arranged on a regular, scheduled basis to enhance the probability of catching improved conditions when a contact is desired for a new grid or state. We should be active in minimizing the impact of the "dead band syndrome" (everyone listening assuming a dead band, no one transmitting to break the ice). Beacons help but should not be depended upon as ultimate "go/no go" indicators.



Multiple power level CW beacon keyer/controller

N4MW

Feb 92

