

# MRAC FM SIMPLEX CONTEST

This contest, the afternoon of **Sunday, February 11, 2018**, is sponsored by The Milwaukee Radio Amateurs' Club – which has been continuously meeting for more than 100 years. The purpose of this contest is to encourage amateurs to learn the basics of contesting and simplex operations and expand the scope of their VHF-UHF operating techniques beyond that needed for repeater operation.

1. This event is a sprint, lasting 2 ½ hours from 1:00pm until 4:00pm CST. Contacts are limited to FM simplex on the following amateur bands: 2 meter (1pm–2pm), 70 centimeter (2:00 pm – 2:30 pm), 6 meter (2:30pm–3:00pm) and 1.25 meter (3:00pm–3:30pm)
2. In addition to the band segments, from 3:30 – 4pm digital voice QSOs can be made, using D-Star, Fusion, or P25 modes. Any band may be used for these contacts, though 2m and 70cm primary frequencies are recommended (See below).
3. Contest frequencies: Contest frequencies correspond to recommendations in the Wisconsin Association of Repeaters band plan.

2 meters (Primary 146.550, 146.565, 146.580 and 146.595 MHz)  
(Secondary 147.540 147.555 147.570 and 147.585 MHz)  
(Digital Modes DStar 145.670 Fusion 146.565)

70 centimeters (Primary 446.025, 446.050, 446.075 and 446.100 MHz)  
(Secondary 446.125, 446.150, 446.175, 446.200 MHz)

6 meters (Primary 52.530, 52.550, 52.570 and 52.590 MHz)  
(Secondary 52.730, 52.750, 52.770, 52.790 MHz)

1.25 meters (223.520, 223.540, 223.560 and 223.580 MHz)

4. Frequencies essentially follow the ARRL VHF Contest rules and Wisconsin Association of Repeaters' band plans.

- On 2 meters no contacts on the 146.52 calling frequency, or the guard channels 15 KHz above and below .52. (Using the Wisconsin Band Plan's 30 KHz spacing and 15 KHz splits). Any entry from a station heard making QSO's on these frequencies will be disqualified. Try to limit activity to the primary frequencies.
- As a matter of courtesy and good amateur practice, avoid the other calling frequencies of 52.525, 223.500 and 446.000 MHz.
- Solicitation for simplex contacts on repeaters, but not 146.52, is permitted.

5. Exchange – Call Sign and four character Maidenhead Grid square.

6. Scoring

- Each QSO on 2 meters is worth one point. 70 centimeter and 6 meter QSO's are worth two points and 1.25 meter QSO's three points. Digital mode contacts are worth three points.
- A station can be worked once per band. A mobile station could be worked more than once per band if it moves to a different grid square. Digital voice contacts are counted separately.
- Each grid square can be used once per band as a multiplier.
- Score would be calculated by multiplying total QSO points by total multipliers.
- Technicians would multiply their final score by 1.5 for a bonus.
- Bonus of 100 points added to final score for working club station W9RH once on any band.

7. There would be Four entry classifications:

BASE - less than 150 watts on 6 and 2 meters and less than 100 watts on 1.25m and 70cm. (ARRL classification of low power for V-UHF contests using common solid-state amplifiers.)

MOBILE- must work from a minimum of two grid squares on any of the bands and power levels same as those specified for the BASE station classification.

HT- (not mobile units run at reduced power) - non-amplified, using any type of antenna, mobile or fixed operation (to encourage innovation and creativity).

CLUBS- compete by having their members note their affiliation when they send in an entry. The winning club is recognized on a plaque at AES Milwaukee.

8. Awards - Second and third place awards are at the committee's discretion.

- First in each of the four entry classifications. (Four possible)
- High score in individual band and in each classification where *significant* activity exists. (Eight possible)
- Awards to be presented at the March MRAC club meeting or will be available for pickup at MRAC table during Superfest.

9. All entries will include a copy of their contest log showing the following data for each QSO: "Band - time - Call sign of station worked - Grid Square". An entry should state number of QSO's, QSO points, grid square multipliers by band, claimed total score and a copy of the contest log. If indicated, note the club you are assigning your score to (only one club should be entered). Entries should be sent in by March 6, 2017.

**THE MILWAUKEE RADIO AMATEURS' CLUB  
FM SIMPLEX CONTEST ENTRY FORM**

SUBMIT WITH LOG BY MARCH 12, 2018 TO  
MRAC, P.O. BOX 26233, MILWAUKEE, WI 53226  
Or send electronic copy to: contest@w9rh.org

**CLAIMED SCORE** \_\_\_\_\_

NAME \_\_\_\_\_

CLASSIFICATION (Check only one) :    BASE\_\_\_\_\_ MOBILE\_\_\_\_\_ HT\_\_\_\_\_

CALL SIGN \_\_\_\_\_ LICENSE CLASS \_\_\_\_\_ GRID SQUARE(S) \_\_\_\_\_

(MOBILES, LIST ALL GRIDS ACTIVATED – A STATION CAN BE WORKED MORE  
THAN ONCE IF YOU/THEY ARE IN A DIFFERENT GRID SQUARE EACH TIME)

ADDRESS \_\_\_\_\_

EMAIL \_\_\_\_\_ PHONE \_\_\_\_\_

CLUB AFFILIATION (One Club Only Please) \_\_\_\_\_

**CONTACTS**

<u>BAND</u>	<u>QSO'S</u>	<u>Q-PTS</u>	<u>POINTS</u>	<u>NUMBER OF GRID SQUARES</u>
2 m	_____	x 1 =	_____	_____
70 cm	_____	x 2 =	_____	_____
6 m	_____	x 2 =	_____	_____
1.25 m	_____	x 3 =	_____	_____
Digital	_____	x 3 =	_____	_____
		TOTALS	_____	x _____

SCORE EQUALS TOTAL POINTS TIMES TOTAL GRIDS \_\_\_\_\_

TECHNICIANS, MULTIPLY SCORE BY 1.5. \_\_\_\_\_

ADD 100 POINTS FOR CONTACT WITH W9RH \_\_\_\_\_

**TRANSFER FINAL TOTAL TO 'CLAIMED SCORE' BLANK AT TOP OF PAGE.**

I HAVE READ, UNDERSTAND AND HAVE FOLLOWED THE PUBLISHED RULES FOR THIS CONTEST. I HAVE OPERATED WITHIN THE LEGAL LIMITS OF MY AMATEUR RADIO LICENSE.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

## HINTS FOR THE NON-CONTESTER - NEW CONTESTER

1. If you take advantage of the rule that permits solicitation of contacts on a repeater, be sure to specify the frequency you are moving to – and confirm that it is not in use. This would prevent someone from automatically moving to a calling frequency. Use the secondary frequencies on two meters for this purpose if a primary is not available. Check first!
2. Turn off PL and Tone Squelch (Encode – Decode).
3. The Maidenhead Grid Square is the most common multiplier in VHF/UHF contests, and is more important than states. **In the Milwaukee area, a stations relationship to the intersection of Lincoln and 70<sup>th</sup> Street is the key (Intersection of 4 grids listed below).** Stations can also look up their grid square on the QRZ Web Site (if you are near a “square” boundary that source may not be accurate). In relation to that intersection:
  - A. Northwest quadrant is EN53
  - B. Southwest quadrant is EN52
  - C. Northeast quadrant is EN63
  - D. Southeast quadrant is EN62

**Also contacts with other grids are welcomed and will count as additional multipliers.**

4. Most contests have a specific log sheet available, which can be downloaded from the Internet. Check out the forms available for the ARRL VHF Contests. Here is an example of a satisfactory format for logging and scoring . . .

Freq	Time	Station Worked	Grid	New Grids	Multiplier	QSO Points	
2m	1:48	N9AUI	EN53	EN53		1	1
	2:10	KA9DNU/M	EN53				1
	2:17	KA9DNU/M	EN63	EN63		1	1
70cm	2:35	N9AUI	EN53	EN53		1	2
	2:45	KB9Q	EN52	EN52		1	2
6m	3:05	N9AUI	EN53	EN53		1	2
	3:15	KB9Q	EN52	EN52		1	2
	3:20	KA9DNU	EN53				2
1.25m	3:40	KA9DNU	EN53	EN53		1	3
	3:45	N9AUI	EN53				3
	3:50	KB9Q	EN52	EN52		1	3
<b>TOTALS</b>						<b>8</b>	<b>22</b>

EXAMPLE SCORE = 8 x 22 = **176**

In this example, an entry from a Technician Class operator would be multiplied by 1.5 for a score of 264.

**Add a of bonus 100 points to final score if worked W9RH club station: 264+10=274**