

Winnipeg Amateur Radio Emergency Service
in conjunction with
Winnipeg Amateur Radio Club



MANITOBA MARATHON
18 JUN 2023
AMATEUR RADIO NOTES
PSE-192

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28 JUN 2023

These notes cover the Amateur Radio component of 2023 Manitoba Marathon. Amateur Radio volunteers were asked for feedback and has been integrated. ARES volunteers provided volunteer communications under somewhat less than ideal environmental conditions (heat and humidity, but nothing like 2022) and all volunteers scheduled showed up Race Day.

Past reports have had four main sections:

- Planning/Preparation
- Operation
- Recovery
- Mitigation.

Past reports have also detailed the documentation distributed to ARES volunteers at the pre-race briefing. That is not addressed in this report.

The notes from the 2023 operation are those of the Winnipeg ARES Emergency Coordinator (EC) and those volunteers that submitted comments and/or participated in our virtual debrief. Planning/Preparation and Operations for 2023 were all based on previous years' experience. Recruiting began early January 2023.

Recruiting for 2023 was very difficult, more difficult than last year where we were running into COVID-hesitancy. Ultimately we had sixty-seven (67) volunteers Race Day, six (6) Water Stations had one operator only (generally assigned in pairs), there were no back-up operators at all (usually have 6; 2 for each sector of the course). Several Amateur operators who did not plan on volunteering for 2023 changed their plans and volunteered when they heard about our volunteer shortage - one later addition to our volunteer list was a Winnipeg Amateur Radio Club (WARC) member who came from South Dakota! One complaint about volunteer performance arose and that was communication to the volunteers involved.

Recruiting was once again done on-line via the WARC website. In mid-MAY it became apparent that registrations for Amateurs registering on the WARC site was not going to the ARES EC as they were supposed to; from that point on the ARES EC was sending prospective volunteers a registration form to complete and submit.

The ARES component of Comm Centre set-up is traditionally done the Friday afternoon before Race Day and 2023 was no exception. A draft set-up SOP was previously established but for 2023 the Manitoba Marathon (MM) mandated a change in Comm Centre location. The proposed new location was surveyed 05 MAY and found to be unworkable, an alternate was identified and

tentative plans were made. MM accepted the proposed alternate location and funded the purchase of two one-hundred foot runs of low-loss feedline (LMR-400). Set up took less than one hour and with the new feedline we were able to go from external antennas to the base transceivers without any cable extensions or use of our “under-the-door” feedline pass-throughs (Comet CTC-50M). Harm Hazeu VE4HAZ, one of the Net Controllers customized two pizza pans so that they could be affixed to a support structure for mag-mount antennas.



Pantenna at IGF showing pizza pans & clamps

Photo Credit J. Dovyak VE4MBQ

As previously reported, ARES “shadows” at the Care Centre once again operated on UHF with their communications fed into the VHF medical repeater via a portable repeater (previously documented). The use of that UHF repeater is critical with the Care Centre being below ground in a steel and concrete stadium. Setting up and testing the portable UHF repeater is a lot of work. This year a suggestion was made that perhaps the VE4UMR repeater at the University of Manitoba Fort Garry campus could be utilized, obviating the UHF portable repeater. Inquiries with University of Manitoba Amateur Radio Society (UMARS) will be made this fall.

In past years, one location (adjacent to Mile 25 Water Station) has had an electronic Wet Bulb Globe Thermometer (WBGT); the Wet Bulb temperature is transmitted to a Marathon physician who decides the course color condition based on the WBGT. For 2023, there were three WBGT to be deployed and used. The location adjacent to the Mile 25 Water Station was maintained and new locations were added:

- Lyndale Drive (between Mile 6 & Mile 8 Water Stations – actually just across from the Mile 6 Station)
- Assiniboine Park (south of the footbridge near the Duck Pond).

Wet Bulb operators called in their reading according to a pre-arranged schedule on the Medical Net and the Doctor's Shadow operator passed the WBGT temperatures to a Marathon physician to decide on course condition or "color". Once decided the Doctor's Shadow operator advised Net Control on course color and course showers on/off and that was transmitted across both nets. The Wet Bulb operators primary communication was on Amateur Radio, secondary was trunked radio as used by non-Amateurs at the Marathon and tertiary was personal cell phone. Trunked radio was utilized at least once when a site was having radio problems. This capability ought to be maintained.

Richard Sheridan VE4ESX (Doctor's Shadow) used plastic milk crates to make stands for each WBGT so it wasn't in someone's hand giving potential spurious measurements.



Don VE4DWG and Andy VE4RDO at the Lyndale Drive Wet Bulb station
Photo Credit Jeff Dovyak VE4MBQ



Jeff VE4MBQ speaking with Don VE4DWG and Andy VE4RDO
Physiotherapist Atoosa Reimer at Jeff's right
Photo Credit Steven Harrison VE4FTS

2023 ARES Debrief

The 20 JUN Winnipeg ARES General Meeting was dedicated to an in-person debrief. Fourteen (14) participants were in attendance.

Several e-mails had been received by the EC that pertained to the conduct of the Marathon rather than the Amateur Radio portion – with the commenters' permission, those were forwarded to MM leadership.

The debrief was moderated by the Winnipeg ARES Emergency Coordinator and followed the following agenda:

What We Already Identified

Race Operations Net:

- NCS
- Outstations
- E-mail comments from volunteers who could not attend debrief

Medical Net:

- NCS
- Outstations
- E-mail comments from volunteers who could not attend debrief.

What we already have identified:

Volunteer recruitment was difficult and insufficient number of volunteers, several Water Stations had one Amateur operator only and there were no back-ups at all.

Nine (9) operators notified the ARES EC in advance that they could not attend and indicated who would pick up their briefing package – that works very well. When they registered, volunteers received a communication outlining briefing time, date and location. A reminder e-mail was sent in 2023 to our volunteers a week before the scheduled briefing, obviating “no shows” in 2023.

Equipment Loan returns were very slow. Borrowed gear was to be turned in to Course Closing vehicle – not all ARES volunteers apparently saw the Course Closing vehicle. A date after Race Day was identified at the ARES briefing for people to turn in borrowed equipment and while some things were turned in by that date, there was still outstanding equipment still out (ARES Coordinator knew who had what). Of twenty-three (23) “loaner” ARES vests that were borrowed, five (5) did not come back initially, of those, three were turned in at the 20 JUN debrief. One mobile radio kit did not come back by deadline.

First Aid provider on course was not able to staff all intended positions due to volunteer recruitment issues. This was shared with Marathon leadership and ARES for 2023 so we were not surprised as we were in 2022. ARES volunteers at Water Stations found it quite helpful to know this in advance.

Course vehicle issues

- World-wide shortage of rental vehicles persists and impacts severely on Race Day; Marathon leadership tries their best to source vehicles
 - Ideally THERAPY 5, THERAPY 6 and MEDICAL SUPPLY 8 would be full-size 5-passenger vans
 - Pre-COVID, mini-vans were utilized and we adapted to that
 - For 2023 we got mini-vans
 - Medical Ice delivery on-course was done by Medical Supply Vehicle and Sweep Vehicles as in past years

- Course vehicle signage issues
 - Degradation of Manitoba Marathon Medical Vehicle signs was first reported in 2011
 - Signs so degraded that in 2022 they were not used
- New magnetic signs were provided for 2023 but the rental vehicle bodies were not metallic.
- Unavailability of magnetic Course Closing vehicle signs first reported in 2014, in 2023 the signs re-appeared. There are now two magnetic signs and two non-magnetic signs, they are a flexible flag more suited for hanging at a fixed site
- It is difficult to access reliable 12 VDC for mobile radios, due to risk of cables being pinched or short-circuited at vehicle doors, direct connection to vehicle battery is now not recommended.

The new Course Conditions flags **were** seen at a number of Water Stations on course.



Condition "Green" Course Flag at Mile 20

Photo Credit Brian Cyr VE4ETC

RACE OPERATIONS NET

NCS

Only twenty (20) operators (out of 37 or so) participated in THU evening Test Net – many of the participants found that they had to alter location slightly for good communications path and we identified that the secondary repeater would not support hand-held operations, so the secondary

Race Operations Net frequency was changed. “Rubber duck” antennas on hand-held radios are inadequate at some locations, a roll-up J-Pole making seminar was suggested.

Some of our volunteers come very well prepared and set up temporary base antennas at their location and run their radios off deep cycle batteries.

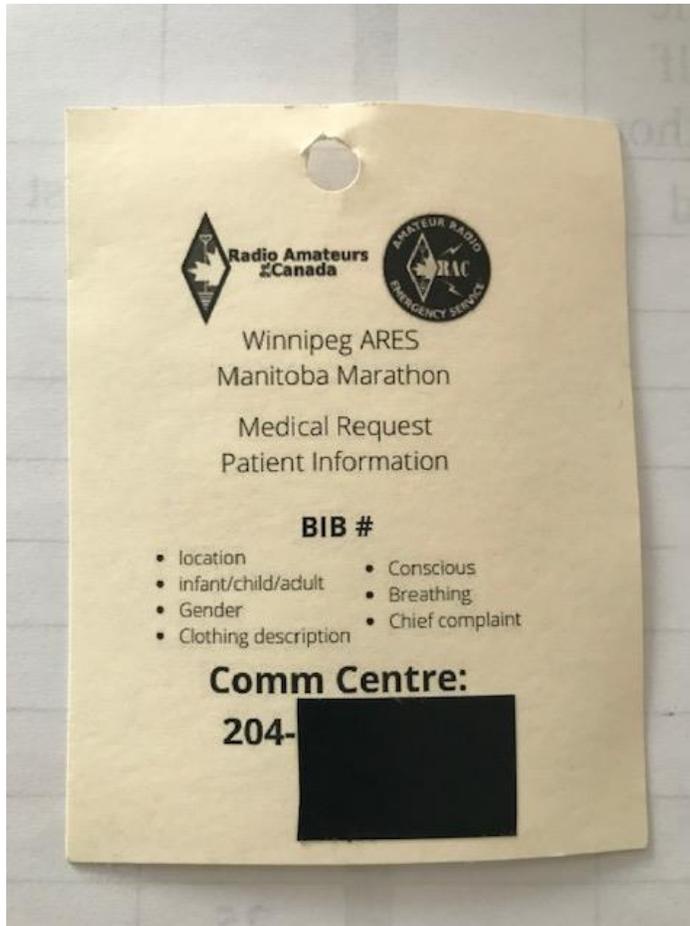


Mile 16 Water Station VE4s GLS & MHZ
Paula VE4MHZ in the foreground
Photo Credit Steven Harrison VE4FTS

One course vehicle did not utilize an external antenna and there were very poor-quality radio communications. During a medical emergency, key information had to be passed by personal cellular phone.

Outstations

All course official cyclists, bike medics and Water Station Captains should have the Medical Request Information tag or equivalent that ARES volunteers get (Ski Patrol Coordinator seemed amenable when asked recently).



2023 ARES Medical Request Information Tag
Photo Credit Jeff Dovyak VE4MBQ

Consider use of APRS for course vehicle tracking – an *ad hoc* committee was formed after 2022 MM but it never reported back and the main proponent was away in JUN 2023.

Runner numbers were hard to read – poor contrast. Color scheme in ARES guide apparently not correct.

No bottled water was provided for course vehicle to provide to participants.

E-mailed comments

1 – All course vehicles should have a mobile radio and a mag-mount antenna.

2 – On course volunteers should park legally and be mindful about parking on private property without authorization – several volunteer's vehicles were towed away at Mile 25, they were parked in a businesses' parking lot.

MEDICAL NET

NCS

Not everyone provides required medical information to Comm Centre operators – required information from medical request information tag should be followed and formatted that way and provided to other sectors.

Not all locations provided for those in need of assistance were correct, some ambiguity when MM mile markers are used vs civic addresses or cross-streets.

Outstations

Having an EMR on Medical Supply vehicle enabled picking up “medical” calls, EMR was able to assess participant(s). If at all possible this staffing should be maintained.

Consider utilizing APRS [had used experimentally previously for AVL, will try to re-invigorate].

MM Event Incident Commander/Comm Centre Manager is to be commended for the way the Comm Centre was run.

E-mailed comments

6 - Wet Bulb batteries were low, replacing the batteries seemed to work

- Wet Bulb should get fresh primary and secondary batteries each year.

7 - Wet Bulb operators should be told in advance that very high humidity may bring about an out of range error

- Maybe we need a Subject Matter Expert (SME) for these devices?

2023 Manitoba Marathon Things to Tweak

- E-mailing a briefing reminder about a week before the briefing seems to have eliminated "no-shows". Maintain the practice of sending out a reminder.
- Insufficient number of Amateur Radio volunteers
 - Insufficient number of back-up or reserve operators, goal is to have at least two back-up operators per course sector (three sectors) and two back-up operators for Care Centre/Comm Centre
 - Going-forward will ask MM to prioritize locations to be staffed
 - Discuss volunteer registration mechanism with WARC and Winnipeg ARES webmasters in an attempt to mitigate on-line problem that arose mid-MAY.
- Amateurs in vehicles unseen until Race Day should have a steel plate with them such as a pizza pan or cookie sheet, in case they need a "pantenna" for use on a vehicle made of non-ferrous material.
- Discourage direct to battery power cables if going through vehicle doorway.
- Require all radio-equipped course vehicles to use external antennas.
- Encourage Test Net participation for operators assigned to Race Operations Net from operating location.
- Consider facilitating a roll-up J-Pole making seminar fall or winter.
- Portable UHF repeater to be on the air no later than 0530h Race Day if arrangement cannot be made with UMARS or if testing reveals unsuitability.
- Consider use of APRS for Automatic Vehicle Location (AVL) of Course vehicles
 - Need dedicated person (with an alternate) to lead/coordinate this initiative, some hardware is available.
- Encourage ARES volunteers to observe equipment loan return deadlines.
- Encourage adoption of ARES Medical Request Information Tag or equivalent by other sectors at MM.
- Encourage use of cross-streets or civic addresses to define location for medical assistance calls
 - E.g. 'Oak Street and Wellington Crescent' followed by 'in front of 10xx Wellington Crescent' as the situation develops instead of 'between Mile 15 & 16'.
- Wet Bulb thermometers should receive fresh primary and alternate batteries each year
- A subject matter expert (SME) should be developed among the Wet Bulb operators.

- Higher contrast runner numbers
 - Actual color scheme to be reflected in ARES guide.
- Bottled water should be provided for participants picked up by course vehicles.

**ORGANIZATIONS SUPPORTING
MANITOBA MARATHON AMATEUR RADIO OPERATIONS**
loaned equipment or facilities, assisted with volunteer recruitment

Winnipeg ARES

Winnipeg Amateur Radio Club

Manitoba Repeater Society

Pathfinders Amateur Radio Club

South-Central ARES

2023 Manitoba Marathon ARES Volunteers

Net	Assignment	Secondary Assignment	Call Sign	First Name	Last Name
Race Operations	Mile 2		VE4BSC	Brad	Crass
Race Operations	Mile 2		VE4SLC	Sandra	Welbergen
Race Operations	Mile 4		VE4DAE	Ernelyn	Hingada
Race Operations	Mile 4				
Race Operations	Mile 6		VA4DON	Don	Suarez
Race Operations	Mile 6		VA4CAT	Catherrine	Suarez
Race Operations	Mile 8		VE4HUM	Greg	Hunphries
Race Operations	Mile 8				
Race Operations	Mile 10		VE4DLA	David	Latour
Race Operations	Mile 10				
Race Operations	Mile 12		VE4SBS	Sunday	Satiada
Race Operations	Mile 12		VE4LYN	Linda	Satiada
Race Operations	Mile 14		VE4WDZ	Wyatt	Zacharias
Race Operations	Mile 14		VE4NOL	Nolan	Harriott
Race Operations	Mile 14		VE4EVN	Evan	Harriott
Race Operations	Mile 16		VE4GLS	Gord	Snarr
Race Operations	Mile 16		VE4MHZ	Paula	Ehn
Race Operations	Mile 18		VE4JDH	Hamish	Donaldson
Race Operations	Mile 18				
Race Operations	Mile 19		VE4DVT	Dave	Terrick
Race Operations	Mile 19				
Race Operations	Mile 20		VE4JBL	Jojo	Lagman
Race Operations	Mile 20		VE4ETC	Brian	Cyr
Race Operations	Mile 21		VE4DRK	Dan	Keizer
Race Operations	Mile 21		VE4DKC	Michele	Keizer
Race Operations	Mile 22		VE4DBV	Drago	Lambda
Race Operations	Mile 22		VA4YYZ	Caiden	Willey
Race Operations	Mile 24		VE4HK	Dick	Maguire
Race Operations	Mile 24				
Race Operations	Mile 24.5		VE4NQ	Wayne	Pettapiece
Race Operations	Mile 24.5		VE4TB	Tom	Adlard

Net	Assignment	Secondary Assignment	Call Sign	First Name	Last Name
Race Operations	Mile 25		VA4CQD	Marc	Collette
Race Operations	Mile 25		VE4JON	John	Wharry
Race Operations	Half Marathon		VA4LMK	Larry	Konowalchuk
Race Operations	Half Marathon		VE4STG	Phil	Mendelsohn
Race Operations	Relay 1		VE4MMG	Mariska	Maguire
Race Operations	Relay 1		VE4MMB	Janice	Behrens
Race Operations	Relay 2		VE4EA	Cary	Rubinfeld
Race Operations	Relay 2		VE4ABT	Bruce	Taylor
Race Operations	Relay 3		VE4GWN	Glen	Napady
Race Operations	Relay 3		VE4YYL	Rosi	Napady
Race Operations	Relay 4		VE4GCV	Gerry	Volkers
Race Operations	Relay 4		VA4SMC	Scott	Campbell
Race Operations	NCS		VE4HAY	Derek	Hay
Race Operations	NCS		VE4HAZ	Harm	Hazeu
Race Operations	Lead Vehicle Full		VE4GZ	Jim	Griffiths
Race Operations	Lead Vehicle Half		VE4GIS	Kurt	Sargent
Race Operations	Closing Vehicle Driver		VE4KAZ	Richard	Kazuk
Race Operations	Closing Vehicle Driver/Operator		VE4JFK	Jeff	Kazuk
Race Operations	Sweep 5 Radio Operator		VE4CLK	Ian	Clark
Race Operations	Sweep 5 Driver		VEQV	John	Pura
Race Operations	Sweep 7 Radio		VA4VMM	Vera	Kolodubsky
Race Operations	Sweep 7 Driver		VE4GG	Gary	Goodman
Race Operations	Start Line		VE4NJR	Nikolaus	Reichert
Race Operations	APRS		vacant	vacant	vacant
Medical	Medical NCS		VE4VD	Garry	Frankel
Medical	Medical NCS		VA4PNO	Jack	Peters
Medical	Wet Bulb - University Cr		VE4HQ	Tom	Blatch
Medical	Wet Bulb-University Cr		KD0ZXI	Steven	Buchy
Medical	Wet Bulb -Lyndale Drive		VE4RDO	Andy	Fenstad
Medical	Wet Bulb-Lyndale Drive		VE4DWG	Don	Gerrard
Medical	Wet Bulb -Assiniboine		VE4MWH	Mark	Havens
Medical	Wet Bulb-Assiniboine		VE4GS	Glenn	Siefert
Medical	Intake/Triage Area		VE4ACX	Yori	Tsuji

Net	Assignment	Secondary Assignment	Call Sign	First Name	Last Name
Medical	Meghan's Shadow		VE4CDM	Craig	Martin
Medical	Dr's Shadow		VE4ESX	Richard	Sheridan
Medical	Therapy 5 - Driver		VE4MBQ	Jeff	Dovyak
Medical	Therapy 5 - Radio		VE4FTS	Steve	Harrison
Medical	Therapy 5 Therapist		n/a	Atoosa	Reimer
	Therapy 6 - driver		VE4MAB	Mark	Blumm
Medical	Therapy 6 - Radio		VE4EAR	Ed	Richardson
Medical	Therapy 6 Therapist		n/a	Matt	Short
Medical	Supply 8 - Radio	Mile 8	VE4SYM	Susan	Collings
Medical	Supply 8 - Driver	Mile 8	VE4TRO	Fred	Collings
Medical	Supply 8 EMR		n/a	Loic	Bazin
Spare3	North of the Assiniboine				
Spare 111	East of the Red				
Spare 22	South of the Assiniboine				
Spare1	South of the Assiniboine				
Spare 33	2nd North of the Assiniboine				
Spare 2	2nd East of Red				
Database			VE4DJS	Dave	Stimpson
Post Event			n/a	Rhonda	Dovyak