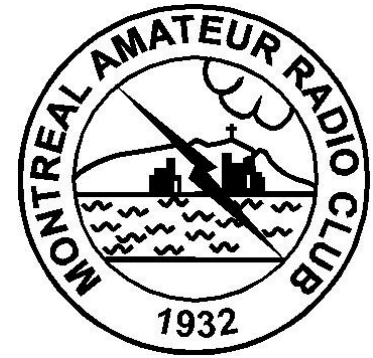


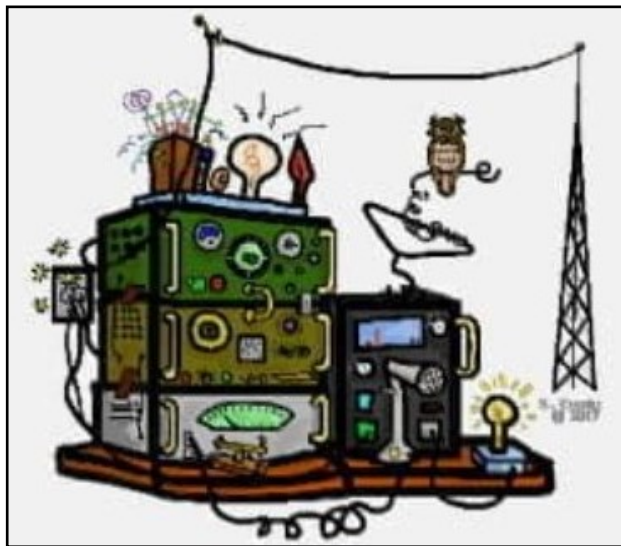
marcOgram

Official Publication of The Montreal Amateur Radio Club Inc.
Box 53047 - RPO Dorval, Dorval Quebec H9S 5W4



Volume 69, Number 9

August 2023



Courtesy G7SYW, Rod.

NEXT MEETING

26 September, 2023

**I USED TO HAVE MONEY.
NOW I HAVE RADIOS.**

Ragchew and general chit-chat: 19:30

Club meeting: 20:00

St. Thomas' Anglican Church,

6897 Somerled (corner of Rosedale) in N.D.G. - Montreal

FROM THE EDITOR'S DESK

Well, there went the summer of 2023; we will never see it again, except in the many photographs taken of Field Day in a new location, Montrose Park in Beaconsfield.

For this issue your editor had an unusual situation - lots of submitted material! So this issue has all the details on Summer 2023 Field Day, with lots of photographs, and next month's issue will have more details on the VE2RED repeater dismantling, and an interesting article on aviation's ADS-B system.

The in-person monthly meetings recommence in September. I hope to see you all there, and please remember to renew your membership.

73 de Nora, VA2NH

- . . . -

MARC / WIARC FIELD DAY

The annual ARRL Field Day Emergency Preparedness and informal contest was held 24-25 June 2023, starting at 14:00 Saturday (18:00Z) and continuing overnight to 14:00 Sunday (20:59Z). The goal was to contact as many stations as possible, and to showcase the attraction of Amateur Radio to newcomers and interested people.

Due to the Fête Nationale festivities on 24 June, our usual location, Centennial Park in Beaconsfield, was not available, so we found a new location, Montrose Park, also in Beaconsfield.

George VE2NGH, and Eamon VE2EGN, from MARC, and Jonathan VA2XZA, and Malcolm VE2DDZ, from WIARC, were charged with working out the details as well as being active participants. Thanks to Batteries Expert on Ile Perrot, the station was powered for 24 hours quietly by their loaned batteries and food was arranged for operators and volunteers. Set-up started at 08:00 on Saturday, and teardown finished by our deadline of 17:00 on Sunday.

DETAILS: see pages 5-8.

The MARCogram is published nine times per year on the second to last Wednesday of September through June, excepting December by the Montreal Amateur Radio Club. Advertising and copy deadline is one week prior to publication.

Annual fees are:
General Members \$30.00
Family Member \$35.00
per additional family member ... \$ 3.00
Postal delivery of MARCogram ... \$10.00

The membership year runs from September 1 to August 31. Memberships received on or after June 1 commence immediately and extend through the subsequent membership year - covering a period of up to fifteen months.

Articles published in the MARCogram may be reproduced providing credit is given to the original author and the Montreal Amateur Radio Club as the source.

The opinions expressed herein are, unless otherwise stated, solely those of the authors concerned, and not those of the Club, the Directors or members and do not represent the policy of the Club.

Directors

President: Marc-André Gingras, VE2EVN ve2evn@marc.ca
Vice-Pres: Leo Nikinen, VE2SI ve2si@marc.ca
Treasurer: Harrison Kyle, VE2HKW va2hk@kylenet.org
Secretary: Nora Hague, VA2NH va2nh@marc.ca
Directors: George Hedrei, VE2NGH ve2ngh@marc.ca
Eamon Egan, VE2EGN ve2egn@marc.ca
Martin Charbonneau, VA2HKR.... ve2hkr@marc.ca

Club Call Sign: VE2ARC

Club Website: <http://www.marc.ca>

Repeaters

VE2BG 147.06 MHz (+) 103.5

Owned and operated by the Montreal Amateur Radio Club. Back on the air but still looking for a new location..

VE2RED 147.27 MHz (+) 103.5

Off the air temporarily while we find a new site. CTCSS tone of 103.5 Hz for access. Thanks to Claude Everton, the VE2RMP group and Metrocom for making this possible.

The repeaters are open to all amateurs.

Meetings of the Board of Directors

Meetings of the Board of Directors are held on the first Tuesday of the month (Aug to June) at 19:30 on-line using the Zoom platform. The club no longer holds in-person board meetings. If you have questions, concerns or suggestions for the Board to discuss, please send an email to ve2arc@marc.ca for inclusion in the meeting agenda.

Club Activities

Monthly Meetings

(last Tuesday of the month)

26 September

31 October - ANNUAL GENERAL MEETING

November.

The VE2RED net is off air until September, and will be held on VE2RWI repeater (thanks WIARC!) due to removal of VE2RED.

Check your Wednesdays, @ 20:00 (00:00Z), for the net on VE2CWI.

See page 3.

Radio Classes

The 2023 January Basic level course have ended. If you know of anyone interested in taking the next course, please direct them to <https://marc.ca/course/> for more information. The next planned Basic course will start in January 2024.

MARC Hamfest

The MARC flea market was successful!

The next MARC flea market will be held in April 2024. The venue we found for the last hamfest was a success, so we will probably return to the Royal Canadian Legion Hall in Lachine, 3015 Henri-Dunant,, Lachine.

Go to <http://marc.ca/fest/> for more information as the next hamfest is planned.

Incoming QSL card service

As has been mentioned in previous MARCograms, we are resuming the club's service of having incoming QSL cards sent to the club for members to pick up at meetings. This is a service which we are offering to our members which both saves the individual members money as well as makes more efficient use of our collective resources.

If you would like to avail yourself of this service please send an e-mail to qsl@marc.ca and we will add you to the list of cards that the incoming bureau sends to the club and we will get them to you somehow.

SolderSpot

Group build Power Supply Project - By Leo VE2SI

If you're interested and even if you've spoken with me before, please send an email to VE2ARC@marc.ca and indicate your level of interest.

Participation is open to everyone and MARC membership is not a requirement. SolderSpot is temporarily on hold. Other options are being considered.

This project is standing by due to available time.



UPCOMING FLEAS/EVENTS

2023

What: Ottawa/Carp Hamfest

Who: Ottawa Amateur Radio Club

When: Saturday, 9 Sep 2023

Where: Carp, ON

What: Drummondville Hamfest

Who: Club radio amateur de Drummondville

When: Saturday, 23 Sep 2023

Where: Drummondville, QC, A20 exit 177

What: NEAR-Fest

Who: New England Amateur Radio Festival, INC.

When: Saturday-Sunday, 13-14 Oct 2023

Where: Deerfield, NH

What: Kingston ARC Hamfest

Who: Kingston Amateur Radio Club

When: Saturday, 14 Oct 2023

Where: Kingston, ON

What: Montreal South Shore Hamfest

Who: Club Radio Amateur Rive-Sud de Montreal

When: Saturday, 21 Oct 2023

Where: Longueuil, QC

Note from the editor.

Due to remaining caution about COVID-19, the list of hamfests and events is still limited. Please check with the organizing authority before planning to attend as some may be cancelled.

VE2RED WEDNESDAY NET REPORT

Any discrepancies, please inform Leo, VE2SI

Starting in September, join us every Wednesday evening at 20:00 local on **VE2RWI** on 2m output frequency of 146.910 MHz (-600 kHz input offset) CTCSS tone of 88.5 Hz. Everyone is welcome. If you have something to sell, or are looking to buy, feel free to mention it.

Note the change of repeater! VE2RED has been removed and is looking for a new site; WIARC has kindly offered the use of their repeater for the net.

We're always **looking for more net operators!**

Interested in adding to this team? Send me an email if you would like to try out Net Operations for an evening.

Leo, VE2SI

leo49@videotron.ca

The VE2RED net closed for the summer July-August, but in that period the repeater had to be removed from its site. It is currently off air while we find a new site. The net has moved to VE2CWI, courtesy of WIARC.

2023-06-21 Net commenced 20:00 local, 00:00Z

Net control Leo, VE2ARC (VE2SI)

Net closed: 21:20

Check-ins: 15

Discussion: Did you know April 18th is World Amateur Day? What should we do about it?

2023-06-14 Net commenced 20:00 local, 00:00Z

Net control Harrison, VE2ARC (VE2HKW) visiting VE2SI's QTH

Net closed: 20:52

Check-ins: 12

Discussion: Will the shift to surface-mount components discourage equipment builders?

2023-06-07 Net commenced 20:00 local, 00:00Z

Net control Leo, VE2ARC (VE2SI)

Net closed: 21:30

Check-ins: 13

Discussion: Amateur radio compared to various social media; are we losing hams?

2023-05-31 Net commenced 20:00 local, 00:00Z

Net control George, VE2ARC (VE2NGH)

Net closed: 21:17

Check-ins: 9

Discussion: Field Day events: what would you like to add or change to make it more enjoyable? If you've never participated, what would you like to see or do at FD?

2023-05-24 Net commenced 20:08 local, 00:00Z

Net control Lee, VE2ARC (VA2LEQ) **THANKS lee!**

Net closed: 20:25.

Check-ins: 6

Discussion: What piece of equipment not primarily used for radio do you use to make operating easier or more pleasant?

It is with great sadness we announce the passing of Ken Fraser VE2KLF. Ken was a devoted member of WIARC, having served as VP from 2001 to 2003 and president from 2004 to 2012. We extend our deepest condolences to his family and friends. He will be missed.

Tino VE2GCE, President West Island Radio Club.



Kenneth Lynn Fraser, VE2KLF, 85, died peacefully at home in Beaconsfield on July 13th, 2023.



Married to Anne for 59 years, Ken was the proud father of Scott, Sarah, and Neal, grandfather of François-William, Emmett and Martyn, big brother to Deanna, Don and Nelson.

A native of Montreal, he attended McGill University and graduated in Electrical Engineering (B.Eng and Masters.) A proud warden of the iron ring, he dedicated his career to teaching at McGill for a total of 45 years, retiring at age 72. Well respected by both colleagues and students alike, he was described as “a man in his element.” Ken’s love for all things electrical fed his passion for Amateur Radio – a good man to have on Field day or as president.

He was also active in the community, supporting Christ Church Beaurepaire, initiatives in Beaconsfield, and he was close to and benefited from the support of amazing neighbours. Life at the cottage with family and friends was pure pleasure for Ken – swimming, snorkelling, fishing and fire! Who could want anything more?

The family will receive condolences on Sunday July 30th from 11:00 a.m. to 1 p.m. followed by a reception at J.J. Cardinal funeral home, 560, Lakeshore Drive, Dorval, 514-631-1511.

Please do not send flowers. Donations to the Alzheimer’s Society of Canada, the SPCA Montreal or a charity of your choice would be appreciated.

SUMMER FIELD DAY 2023

Once again this year the Montreal Amateur Radio Club (MARC) teamed up with the West Island Amateur Radio Club (WIARC) to host this year's summer Field Day event as a joint effort. Due to the fact that this year, June 24, which is Quebec's National holiday fell on the weekend of Field Day we were not able to set up at our usual location at Centennial Park in Beaconsfield because of the fireworks and celebrations held there. We were thus given a choice of a few parks which would be free of activities that weekend and we chose Montrose Park in Beaconsfield. This park is fairly large which gave us room to set up three stations and it had plenty of tall trees to set up our antennas. It also sits in a residential area which is exposed to the public. The park had a portable toilet on site but no city water or services so we had to supply our own tables and chairs and bring water for washing up. It was also located right next to the CP railroad tracks along highway 20 which caused a bit of noise when freight trains rolled by. But it was a nice big park and we were lucky to get it.

This year we had planned a 2A Club operation which is operating two radios simultaneously. The 2A category had also permitted us to set up a separate GOTA (Get On The Air) station with a dedicated GOTA coach for non-licensed folk and new hams who would be able to operate at their own pace and would need extra coaching. So in essence we had three HF stations operating simultaneously but for obvious reasons on different bands and modes so as to not cause interference.

Our antennas consisted of a 3-band doublet at 50ft, and 40m and 80m sloping verticals at 60ft for main station 1, a DX Commander 4-band vertical for main station 2, and a multiband doublet at 40ft for the GOTA station. We also had a satellite station with a 6m VHF station which had 2m and 70cm cross-polarized Yagis on an AZ-EL rotator 10ft high controlled by software and a 2-El Moxon beam 15ft high for 6m.

Radio equipment consisted of an Elecraft K3 + P3 for main station 1, Icom IC-7300 for main station 2, Icom IC-9700 for satellite, Icom IC-7300 for 6m VHF, and an Icom IC-751A for the GOTA station. The main station also had separate band-pass filters to reduce mutual interference. The main station power supply consisted of four 195 Ahr lead-acid deep-cycle batteries which

were generously loaned to us by Batteries Experts of Ile-Perrot. The satellite and GOTA stations all had their own separate LiFePO4 or deep-cycle lead-acid batteries. Once again we were completely silent having no generators which was a blessing due to the proximity of residences just across the street.

To be more organized, I had broken down the organization of the site setup to separate teams with a dedicated team leader who was responsible to set up each of the 4 stations with their respective antennas by recruiting whatever help they needed among the many volunteers who showed up. I was responsible for main station 1, grounding and power, Jonathan VA2XZA set up main station 2, Malcolm VE2DDZ had set up his satellite and 6m VHF station, and Eamon VE2EGN had set up the GOTA station and was also the GOTA coach. The two main stations were located in our big operating tent, with the satellite and VHF stations located in a separate tent not too far away. The GOTA station was in a separate tent located at the edge of the park with its own trees for the antenna so as not to cause much interference to the main stations.

The entire month of June had very unpredictable rainy weather and we were all hoping that it would not rain on Field Day weekend. Finally the forecast called for 60% rain on Saturday with no rain on Sunday. So as soon as we arrived at 08:00 Saturday morning we set up the tents in case it started to rain. We had finished installing the equipment by 10:00 and I just completed installing the last antenna for main station 1 when the rain arrived around 13:00. The set up went very smoothly as each team knew what they had to do so at 14:00 we were all ready to start!

The bands were not very cooperative this year. 10m was essentially dead and we only managed a handful of contacts on 15m. Jonathan had also set up his station 2 for FT4/FT8 so that also gave us an edge. 40m and 20m thus became the preferred bands. Once again $\frac{3}{4}$ of our contacts were on CW and contacts on 15m and 80m were all CW and FT4/FT8. We were lucky to have two expert CW operators, Jonathan VA2XZA and Vlad VA2AN who were able to really bring in the points with a total of 325 CW contacts. For the same reason, the 6m band was also quite dead and we only managed

(Continued on page 6)

(Continued from page 5)

8 FT8 contacts. The satellite station did quite well compared to the past as we made 15 contacts on FM and SSB birds. A few people operated during the night on 80m and 40m as most folk including myself went home for the night. But we were back in full operation by 07:00 Sunday. We ended this year's Field Day with a total of 843 QSOs (including satellite and GOTA) and ended up with a total of 4086 points including 1150 bonus points which was much better than we did last year.

Being located right in the middle of a residential area drew the attention of quite a few people who dropped by out of curiosity which gave us the chance to explain what Amateur Radio is all about and give them a demonstration of the various stations. Mind you the GOTA station became quite popular and Eamon VE2EGN did a fine job in coaching. We made a total of 44 GOTA contacts and we also had four kids from age 9 to 15 who made a total of four contacts!

We also ate quite well during Field Day. I had brought a variety of cold cuts, cheese, sliced tomatoes, pickles and fresh rye bread so we all made our own sandwiches for lunch on Saturday. The rain finally stopped in the late afternoon and we ordered some delicious pizza for supper. It was comical to see the reaction of the pizza place when we told them that the delivery address was a park!

Sunday breakfast consisted of leftover sandwiches and some fresh coffee from Tim Horton's.

At 14:00 Sunday we shut down operations and started tearing down the site. I also had discovered that operating two stations in the main station had completely drained our batteries to the point that towards the end we were having equipment starting to trip out. We were running a 40A boost converter which maintains a DC bus voltage at 13.9V to feed the radios, but it had started to trip out when the battery terminal voltage dropped below 10V when we were transmitting. Now I know to include more battery capacity or a separate power source for the second station the next time we operate 2A. By 17:00 we were all packed and went home.

We all had a lot of fun this year and I must thank all the operators and volunteers who helped out with preparations, setup, and running errands; notably Jonathan VA2XZA, Malcolm VE2DDZ, Eamon VE2EGN, Leo VE2SI, Vlad VA2AN, and Harrison VE2HKW. I would also like to thank the Beaconsfield Town Council for giving us permission to operate along with Julie Poirier-Monette, town Coordinator of Cultural Life, for all her help. Finally, I would also like to thank Batteries Experts in Ile-Perrot for their generosity in loaning us the batteries. 73 George – VE2NGH



GOTA station with Eamon VE2EGN as coach.

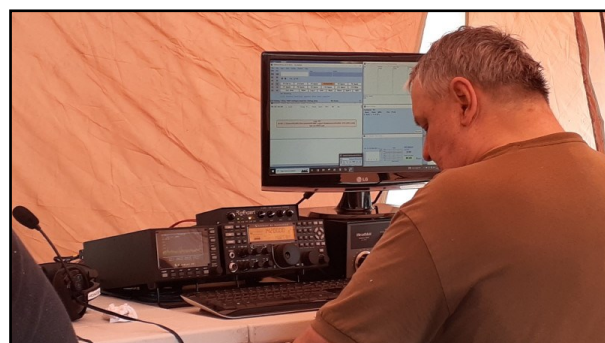


Upper right: Main operating tent.



VE2NGH operating main station-1

Field Day, general



FIELD DAY SATELLITE STATION REPORT

By Malcolm, VE2DDZ

Satellite

[All times EDT unless marked otherwise.]

I worked all possible passes from 18:00Z Saturday until about 02:00Z Sunday (10:00 EDT.) There weren't a lot of good passes. Many satellites were not on the air or the passes had low maximum elevation. There was nothing heard on HO-113, CAS-4A, CAS-4B, FO-118, AO-109. I did hear AO-07 around 16:15 but couldn't work it. Its frequency seems to drift a lot.

Shortly before 18:00 there was an RS-44 pass with a maximum elevation of 44 degrees. It is a nice, high, stable linear satellite. Indeed, it is the satellite of choice for the satellite experts who are working FT4 through the birds. We got three contacts on this pass, all SSB. The first counts 101 points, the other two are 1 point each. That 😊 was it for Saturday. I listened for other passes up until about 22:00, but nothing heard.

I was beat and decided to sleep in the satellite tent on a cot. Mike set up his bivvy beside the tent. I think I went to bed around 23:00 or 00:00, setting an alarm for 04:45 in order to work a 05:00 ISS pass. The ISS sometimes has astronauts working Field Day, but that was not expected this year. The ISS does have a crossband repeater. I had heard it while practising before Field Day, and it is very solid and stable. Indeed, unlike some sats, you can punch it with as much power as you like on the uplink and not over drive it. That's usually to be avoided, but in the competition for contacts that arises at Field Day, sometimes you have to turn it up to 11.

I heard Jonathan talking to Mike as he was leaving the site, I think it was around 04:00. Since I was planning to get up at 04:45 anyway, I rolled out shortly after Jonathan left. I chatted with Mike and the other Mike who arrived to work some CW on the main station. Since I was up and there was another RS-44 pass (33 degrees MaxE) predicted at 08:36Z (04:36 EDT), I decided to work it. I'm glad I did, as we got another three contacts on that pass, including my first ever satellite DX.

I worked EB1AO at 08:46Z through RS-44. At that point the satellite was az 59, el 29 for us, about 2345 km range. For him, it was az 303, el 7, range 3760 km. So the signal travelled about 6105 km to communicate over the 5100 km great circle distance from our station to his. I had a big grin on my face, in spite of the early hour and the lack of coffee.

I continued working passes, FM satellites PO-101, SO-50, and the ISS and a third RS-44 pass until there were no more good passes around 08:30. I continued listening for other satellites, but heard nothing. The really nice satellites of a few years ago are mostly QRT now. I didn't hear a single signal from any Fox satellite (the big series of AMSAT-NA satellites) nor from any FunCube satellite (the big satellite series from AMSAT-UK.) I had really hoped to work through AO-91, Fox-1B. I listened to numerous passes, but nothing heard. Also gone are the main Chinese linear series XW-2A, XW-2B, XW-2C, XW-2D and XW-2F. We have had many contacts through them at previous Field Days, but they all seem to be QRT now.

I am disappointed that there wasn't more activity while people were around, but we have no control over what satellites are active, nor over when the good passes are. I feel badly that George and Jonathan didn't get work satellite, as both had expressed an interest, but the good passes all turned out to be in the wee hours of the morning.

The totals this year were 19 contacts. Three were dupes and three were ineligible, so 13 contacts for QSO points. Of note is that almost all of our contacts were V/u, 2 m up and 70 cm down. This is a change from a few years ago: all the Fox sats, all the FunCube sats, and the XW series of linear sats were U/v.

(Continued on page 8)

(Continued from page 7)

Six meters

Six meters was not open at all this year. I don't think it was a problem with our set-up. I did check that we were getting out a bit on PSKReporter; we were getting out somewhat at least. We worked RANV (W1NVT) multiple times. I think that they were in the same boat as us and wanted to check their set-up occasionally, so they called us.

We had a total of 11 contacts, but four were with RANV so a total of 8 contacts for QSO points.

[Editor's note: VE2DDZ's detailed report is on page 9]



New for this year is a used KenPro Az-E1 rotator. In the lead-up to field day, I installed water-proof connectors on the rotator body, modified an old tail-piece to mount the rotator on the mast, and repaired the controller box. I computerized the controller using the same Easy Rotor Control interface that I used previously. It worked without a hitch at Field Day. On 2m is the same kit-built preamp as in previous years. The 70cm preamp is a used Mirage GAsFet purchased at the same time as the rotator.



All the power was provided by a LiFePO4 battery (out-of-sight in the battery box) purchased from our sponsor, Batteries Expert of Île-Perrot. The inverter on top is needed only to run the rotator controller that sits between the computerized rotator controller we used previously and the new-to-us rotators. On site we discovered that the inverter I had planned to use put out hash on 2m. Not what you want for weak signal work. Eamon loaned me the inverter you see and saved the day. Thanks, Eamon!

The satellite and 6m station. The 19", 6U Gator case on the left holds the radios and peripherals. The ancient laptop runs WSJT-X for digital modes, controlling the radio and generating and decoding the radio's audio stream. We ran only FT8 on 6m this year. If 6m had opened up we might have tried some FT4 with its quicker turn around time. For satellite operations, the laptop controls the radio, adjusting frequencies to account for Doppler shift. It also controls the rotators, so the antennas point at the satellite. This is all done with a single USB connection from the laptop to the rack case. That connection carries CAT for two radios, audio for two radios, and rotator control.



I used a Stressed Moxon from Par Electronics on 6m. It doesn't have quite the gain of a two element Yagi, but set-up is very quick and it does have a better front-back ratio. Of course, if 6m is not open then any gain is irrelevant and if 6m is open then we'll make contacts regardless of slight differences in gain.

A closer look at the rack. On the bottom left is an Icom IC-9700. It provides all-mode 2m, 70cm, and 23cm and has features very nice for satellite and weak-signal VHF+ work. Above it is an Icom IC-7300 which I used for 6m. The radios are held in place by an extruded t-slot aluminium frame. This construction allows some flexibility in mounting everything inside the rack, at the same time the radios are held very securely. I needed an upgrade to the rack construction in order to fit two radios where there was only one previously. On the right, top to bottom, are a GPS/clock, a blank space with a key, the rotator controller interface, an audio mixer, and the USB connection.



Tear-down complete, the crew is tired, but happy.

Satellite	Tx	Rx	Mode	Date	Time (UTC)	Call	Class	Section	Grid	Freq Tx	Freq Rx	OP	Notes
RS-44	2M	70CM	SSB	20230624	2151	W2GDJ	1D	ENY		145.965	435.640	VE2DDZ	RS-44 is a Russian satellite
RS-44	2M	70CM	SSB	20230624	2154	W3YP	1D	EPA		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230624	2155	VE3YRA	3A	GH		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	0841	W2RC	2A	NLI		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	0842	W9LDX	1A	IN		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	0846	EB1AO	1D	DX	IN52	145.965	435.640	VE2DDZ	Satellite DX!
PO-101	70CM	2M	FM	20230625	0857	W2GDJ	1D	ENY		437.500	145.900	VE2DDZ	
PO-101	70CM	2M	FM	20230625	0855	W00JY	3A	SD		437.500	145.900	VE2DDZ	INELIGIBLE (second contact on the same FM satellite)
ARISS	2M	70CM	FM	20230625	0908	K3PSG	5A	WPA		145.990	437.800	VE2DDZ	FM repeater contact through the ISS counts as satellite
RS-44	2M	70CM	SSB	20230625	1031	W4DW	6A	NC		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	1036	K4TS	7A	VA		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	1035	W2GDJ	1D	ENY		145.965	435.640	VE2DDZ	DUPE
RS-44	2M	70CM	SSB	20230625	1039	K4TS	7A	VA		145.965	435.640	VE2DDZ	DUPE
RS-44	2M	70CM	SSB	20230625	1041	K8UNS	4A	MI		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	1041	W1BOS	3A	WMA		145.965	435.640	VE2DDZ	
RS-44	2M	70CM	SSB	20230625	1042	W4DW	6A	NC		145.965	435.640	VE2DDZ	DUPE
SO-50	2M	70CM	FM	20230625	1221	K4TS	7A	VA		145.850	436.795	VE2DDZ	
SO-50	2M	70CM	FM	20230625	1222	K8UNS	4A	MI		145.850	436.795	VE2DDZ	INELIGIBLE
SO-50	2M	70CM	FM	20230625	1223	N2FYA	1D	CT		145.850	436.795	VE2DDZ	INELIGIBLE

Six meters

Band	Mode	Freq	Date	Time	Call	Class	Section	Gridsquare	OP	My_grid	Note
6m	FT8	50.314412	20230624	181500	W1NVT	2A	VT	FN34	VE2DDZ	FN35BK	
6m	FT8	50.314170	20230624	185833	VA2CNE	1D	QC	FN35	VE2DDZ	FN35BK	
6m	FT8	50.314170	20230624	192845	W1NVT	2A	VT	FN34	VE2DDZ	FN35BK	DUPE
6m	FT8	50.313925	20230624	225045	VE2XMR	1D	QC	FN35	VE2DDZ	FN35BK	
6m	FT8	50.313925	20230624	235515	AK1EB	1D	VT	FN34	VE2DDZ	FN35BK	
6m	FT8	50.313925	20230625	014815	W1NVT	2A	VT	FN34	VE2DDZ	FN35BK	DUPE^2
6m	FT8	50.313925	20230625	111215	W1NVT	2A	VT	FN34	VE2DDZ	FN35BK	DUPE^3
6m	FT8	50.313925	20230625	131215	VE2FCR	1D	QC	FN25	VE2DDZ	FN35BK	
6m	FT8	50.313925	20230625	132015	N4NE	3A	GA	EM74	VE2DDZ	FN35BK	A little open
6m	FT8	50.313771	20230625	150300	N4MCH	5A	GA	EM83	VE2DDZ	FN35BK	
6m	FT8	50.313771	20230625	161000	VC2STONKS	1D	QC	FN35	VE2DDZ	FN35BK	