

# Saskatoon Amateur Radio Club

2013 Field Day – Special Feedline Edition

June 22-23

Our Amateur Radio Showcase

Let's Have Fun!



**John Allen, VE5SJA, SARC Field Day Chairman**

## Still Wanted:

Contact John in person or at 306-974-2699 or 306-321-4457 or [johnallen46@shaw.ca](mailto:johnallen46@shaw.ca) .

- Another computer for logging and perhaps rig control
- Of course, an antenna assembly and tower erection crew on Saturday morning and a tear down crew on Sunday afternoon. I expect this will not be a problem
- Some patient VHF aficionados for Field Day to watch for 6 meter openings by scanning for beacons and listening to 50.125 USB..
- Your ham acquaintances to participate with us – call and invite them now!
- Volunteers to greet, guide and inform people
  - press
  - government official
  - Agencies
  - Other interested people
- Hams to sign up for operating shifts
- People under 19 to participate
- Headphones and Y-Connectors – stereo 3.5 mm with adapters to ¼ in.
- USB to RS232 Converters and any necessary software to make them go
- People with cameras! Take photos of everything you find interesting. Videos also welcome.

## OVERVIEW

Hey, look! VE5AA is on the ARRL Field Day Locator Page, <http://www.arrl.org/field-day-locator> .

Members of the Saskatoon Amateur Radio Club (SARC) traditionally participate in the annual ARRL Field Day held the last full weekend in June.

SARC will provide the SARC Trailer and some radio and antenna equipment as well as a gasoline –powered generator. Much of the needed radio equipment, computers, power supplies, transmission lines and antennas will be provided by SARC members (and some may be borrowed from other organizations such as the WDM or other people).

Besides our bread and butter HF contacts with others around North America, we will attempt to:

1. **Welcome and inform visitors** from the general public, the press, from among elected representatives and served agency officials. Invite interested visitors to make one or two QSOs.
2. Receive and record the **W1AW Field Day Bulletin**
3. Make at least **5 contacts using energy** that is neither from the commercial power lines nor from petroleum powered generator. – This will be done on one of the 2 main stations, perhaps radios will be swapped.
4. Send a **National Traffic System formatted** message to the RAC Saskatchewan Section Manager using a gateway to the Winlink 2000 e-mail system. The message will leave our grounds via amateur radio HF. And attempt to send or receive NTS Format messages to or from other stations using the same method. – This will be done on one of the 2 main stations, perhaps radios will be swapped.
5. Attempt a QSO with the **International Space Station** (no extra points, but fun)
6. Make an **Earth-Satellite-Earth Contact** through an amateur satellite
7. Have people **18 and under** who wish to each make and log one or more QSOs.
8. Make and log **VHF/UHF** voice and packet Field Day QSOs. Note: Must be simplex, but using 146.520 is against rules. Monitor 146.490 for FM voice and 145.100 for FM packet. A schedule will probably be published for local contacts.

### Goals of the day:

- 1) Each of us and each of our guests goes home without injury
- 2) To have SARC members participate in and enjoy the Field Day.
- 3) To show our guests the scope of amateur radio and some of its involvement in emergency communications.

**EVENT DATE:** Friday, June 21, Saturday, June 22, and Sunday June 23, 2013

**EVENT SITE:** Western Development Museum Parking Lot and adjacent Boomtown Park, Lorne Avenue South, Saskatoon

**Tentative overall schedule** – note that orbit predictions shift as the days go by:

EVENT TIME:		CST/MDST
Friday, June 21	Get portable radio, and recording computer and digital software to WDM Parking Lot Set up mast for VHF station	18:00
	Try to receive and record W1AW Bulletin	
Saturday, June 22	Collect trailer and equipment at SARC Storage Location	5:30
	Start set up at WDM Parking Lot	8:00
	Target Set up complete – testing starts	11:00
	Desired official Field Day key down/PTT (log this time)	12:00
	<ul style="list-style-type: none"> <li>• Field Day QSOs, etc.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Guide and inform media, officials, interested persons</li> </ul>	
	<ul style="list-style-type: none"> <li>• Invite visitors to operate</li> </ul>	
	<ul style="list-style-type: none"> <li>• Young person's QSOs</li> </ul>	
	Attempt Alternate Energy Contacts	3:00 – 4:30 p.m.
	International Space Station attempt	4:03 - 4:09 p.m.
	Barbecue supper	5:00 p.m.
	International Space Station attempt	5:39 – 5:46 p.m.
	International Space Station attempt	7:16 – 7:22 p.m.
	Attempt NTS format message to RAC Section Manager	6:45 - 7:30 p.m.
	International Space Station attempt	8:53 – 8:58 p.m.

**Tentative overall schedule** – note that orbit predictions shift as the days go by

Sunday June 23	<ul style="list-style-type: none"> <li>• Field Day QSOs, etc.</li> </ul>	12:01a.m.
	<ul style="list-style-type: none"> <li>• Guide and inform media, officials, interested persons</li> </ul>	
	<ul style="list-style-type: none"> <li>• Invite visitors to operate</li> </ul>	
	<ul style="list-style-type: none"> <li>• Young person's QSOs</li> </ul>	
	Amateur Satellite SO-50 Attempt	7:44-7:53
	See if there are replies to NTS Messages	8:15-9:00
	Amateur Satellite SO-50 Attempt	9:25-9:34
	Field day QSO end (24 hours after official key down)	12:15 p.m.
Post event	Tear down, put away & return equipment to SARC Storage Location (end) Return borrowed radios and computers.	
	Rest	
	Maintain and repair equipment	
	Finish Field Day Summary,	
Wednesday, July 23 or earlier	Submit Field Day Report	

We are going to report our Field Day score and activities to the ARRL so we will observe the Field Day rules.

We will operate Class 2A High Power (2 100 watt HF stations) with an additional satellite station (does not increase 2A class) and possibly an additional VHF station (also does not increase 2A class) to make local 2 meter contacts and to search for 6 meter openings. From the rules, "Field Day entries are classified according to the maximum number of *simultaneously* transmitted signals." From the Field Day Packet, "If you are claiming "2" transmitters, you need "2" stations capable of operating at the same time – remember operating means sending AND receiving." These stations must also be simultaneously manned at some point during the Field Day.

We have now invited the press, plus about 35 elected and agency officials and the general public. We must be committed to having the best Field Day we can manage. We have told them that this is an emergency exercise so we should try to demonstrate that. If we are busy doing things and trying to make things happen, it can make a good impression for amateur radio. But Field Day is a learning experience for each of us, and not everything has to go perfectly all the time.

Computer logging can help us more easily make our Field Day report to the ARRL. Please try to log our main stations using the computer program TR4W. It has a user interface that is a little different than we are used to. We may enable RTTY, if preparation time permits, for those who wish to make digital QSOs. A logging computer will be provided at least at each of the 2 HF stations.

We will try moving one HF station outside the trailer and to a tent some ways away from the trailer to control interference. This station will use VE5NED's "Garbage Can Field Day" antenna. If mud prevents us from getting the trailer, we will operate from as many tents as we can muster. We will rig a 20 meter dipole for the station that would have been in the trailer.

We will do our best to keep the radios running through the supper hour by rotating operators, giving each operator a chance to socialize. We will also operate throughout the night as far as available operators and operator energy allows.

We need a foul weather plan for our barbecue supper later on Saturday afternoon.

A Master's student from the UofS, Tim Repas, VE5SAT, is going to attempt satellite contacts for us and participate with other things. Please make him welcome and included. We are Saskatoon!

**If everything** gets organized and the HF stations are running smoothly, we will attempt to establish a VHF station – primarily 6 metres. There may also be 2 m and 70 cm if hams in Saskatoon who cannot come would like to have a 2 m QSO with us.

## Field Day Priorities & OBJECTIVES:

We will have to use our manpower resources wisely. Each of us must pitch in for each of these activities.

1. Each of us and each guest and each passerby goes home **uninjured**.
  - a. Each of us identify potential hazards, think how to keep the hazards from hurting people, make sure you have a good grip or good traction, separate with barriers, mark, notify. Be vocal! Don't minimize someone else's concern.
    - i. Being crushed
    - ii. Falling
    - iii. Tripping
    - iv. Hit by falling objects
    - v. Breathing exhaust gas of generator
    - vi. Being burned by touching hot generator motor
    - vii. Gasoline fire from premature filling
    - viii. Being affected by lightning
    - ix. Electrical injuries
    - x. RF injuries
  - b. When doing something involving heavy things or things that can drop, such as the trailer tower, **appoint crew chief** (preferably with experience), and make a plan of how to accomplish the objective while hurting nobody. Crew chief is to stand back, assess whole situation, keep all people out of harm's way and direct.
2. Submit **Field Day report** – everything is working towards this
3. Set up **generator** – check oil, fill with gasoline & add gasoline stabilizer
4. Set up **HF Stations and Logging Capability** & Get operators
5. Each participant and visitor is recorded in the **Participants'/Visitors' Book**
6. **Greet and inform** each visitor
  - a. media
  - b. Officials
  - c. Other interested people
7. Make and log HF **Field Day OSOs** with wide participation and opportunities for visitors
8. Make and log **Alternate Energy QSOs** (100 points for 5)
9. Send NTS Form Messages
  - a. Send the **Field Day Message** to RAC Sask Section Manager (100 points)
  - b. Send **NTS Messages** to other stations and maybe receive some (10 points per message handled to maximum of 100)
10. Have at least one **young person** make at least one field day contact
  - a. (50 points for one or more QSOs by any person 18 or under)
11. Get and record the WIAW **Bulletin** (100 points)
12. Computer CW to radio
13. Barbecue - all attendees to sign Participants'/Visitors' book.
14. Satellite contact attempt (100 points if successful)
15. VHF Station – ISS attempt
16. Set up computer assisted tuning – automatic recording of transmit frequency to logging program

17. Make and log **VHF** voice and packet Field Day QSOs. Note: Must be simplex, but using 146.520 is against rules. Monitor 146.490 for FM voice and 145.100 for FM packet.
18. Networking Logging Computers
19. Maintain and Repair all club equipment
  - a. Oil & filter change on generator.- Test run with load (borrowed space heaters)
  - b. VHF radio in trailer
  - c. Battery box
  - d. Trailer mechanical inspection

## **Policies**

All participants and visitors will be signed in or recorded in the participant's/visitors book.

When a person recorded as a visitor assists with any thing to do with our getting points, set-up, moving equipment, making or logging QSOs, tear down, transport, his or her name marked as a participant

Have your identification on every thing you lend to this event.

Station time will be in Z (UTC) – all logging will be in Z, reference materials will have time references clearly marked.

Oil level in generator will be checked before starting engine every time.

Coffee, tea, water will be provided. Participants and visitors will be responsible for their own meals and soft drinks. The barbecue may be subsidized by the club.

ARRL Rules – if you participate at our station, you may also participate at another station, but neither of these two stations may claim point credit for QSOs with each other.

If you see or hear any indication of lightning or thunder, or if someone tells you about lightning or thunder – immediately shut off the transceiver, disconnect the transmission line and throw it out of the trailer or tent and unplug the power supply, then make sure everyone else knows. People are to take shelter in their vehicles or the entrance hallway of the Western Development Museum. This non-working condition will be maintained until 30 minutes after the last indication of lightning or thunder in our area.



Wandering satellite station

VHF Station?



Site Plan

**Thank you to (not in order of importance, and sorry if I missed you):**

**Peter, VE5JZ**, for going out to VA5RON's farm and checking out our beam antenna

**Bob, VA5BRT**, for going out to VA5RON's farm and advising on the checking out our beam antenna and for creating an alternate power system and for bringing a QRP radio, and lending an extension cord.

**Dave, VE5DHE**, for volunteering his truck and his time to tow the trailer and to transport the generator.

**Garry, VE5SG**, for offering a Yaesu FT-897 transceiver with VHF, UHF capabilities, a SWR meter, a Signalink Sound Card Interface, a laptop computer, a ladder, gas cans, a canopy tent, towing mirrors and for agreeing to learn enough about RMS Express and Winlink 2000 gateways to send a message and agreeing to come to the WDM Parking Lot Friday evening to listen for the Field Day Bulletin and his encouragement. And thanks to **Sylvia** for agreeing to bring provisions to the barbecue.

**Sylvan, VE5ZX**, for advising me (sorry, Sylvan, I listen better about some things than others) and promising an Icom IC-736 Transceiver and USB CAT cable

**Tim, VE5SAT**, for promising to attempt some satellite contacts for us and offering some of his other equipment and his talents and time

**Ron, VA5RON**, for charging the battery in the trailer. We owe Ron a lot for storing our trailer and equipment, when you see him thank him.

**Terry, VE5TLC**, for agreeing to help me with computer preparation, and a laptop computer and a wireless router.

**Ned, VE5NED**, for offering his "Field Day garbage can antenna", a RigBlaster Sound Card interface and an associated radio.

**Mike, VE5MIK**, for offering a tricked-out FT-2000 (wow) and a TS50.

**Ron, VA5RJF**, for encouragement and signing all those letters.