

Ottawa Carleton Educational Space Simulation Mission Adult Supervisor Guide



OTTAWA-CARLETON
DISTRICT SCHOOL BOARD

2020 Spacesim Mission to Mars: Jezero Crater Watershed Channels

Thank you for helping to supervise the mission activity this year. Your participation makes the process possible. Your time will be spent monitoring the students as they perform their various duties during the simulation activity. No matter the time of day, there will always be some activities taking place on site. I hope that you find this to be an educational and engaging activity. Please keep this package with you.

Your primary responsibility is to ensure student safety.

You will have access to one of my cell phones (**613 513-8639**). You should keep it with you at all times and pass it to the next adult supervisor. This is to ensure that everyone involved knows which number to call if they need to contact the simulation. It facilitates communications between parents and students should this be necessary and for people to call to be let into the building after it has been locked up. The cell phone also is the means by which your replacement supervisor can communicate with you.

If your relief supervisor fails to show up, please call Dr. Magwood (see below).

Student Activities

Your task is to supervise the students as they carry out preparations and the actual mission activities. If you are uncertain about any activity, the students should be able to explain what they are doing when ever you ask them. You will have access to the mission plan and detailed itinerary for the day. If you are not comfortable with an activity, please feel free to stop it until you have had a chance to consult with the students, with Dr. Magwood, or until Dr. Magwood's next supervision shift.

Simulated Emergencies

A number of different activities will take place during the mission. Many of them will be simulated emergencies. In order to avoid confusion, the following communication protocol will be used.

Beta Emergencies: Anything that the students identify as a beta emergency is something that is taking place as part of the simulation process. These need not be a source of concern to you as long as the students seem to be acting in a safe manner.

Alpha Emergencies: Anything that the students identify as an alpha emergency is a real emergency that requires your immediate attention.

If you hear the expression "alpha emergency," this is something that you need to act on.

If at any time you suspect that something is happening that is unsafe or contravenes school policies, you should tell the students to stop the simulation process and contact the teacher advisor.

Contacting the Teacher Advisor

Dr. Magwood's cell phone: **613 415-4869** (he will answer this even during class)

He also can be reached at: **Lisgar Collegiate (613 239-2696) from 8:30 AM to 3:00 AM**
Home (613 715-9715) at any other time that he is not at 440 Albert St.

If he is not at one of those two places, he is driving between them; please leave a message.

Care Staff

The building care staff will be in the building at all times. In the late evening and early mornings, they will be in the room next to the spacesim room most of the time (to the left as you exit the room). Rather than check their room, please contact them by phone if needed.

Custodians can be reached at: **613 978-8040** (there is a speed dial selection for this: Albert St. Custodians)

The chief custodian is Roch Beland (on site during the day)

The lead hand custodian is Richard Lacelle (on site in the late afternoon and evening)

During the overnight shift the custodian will be in the room next door (to the left out of our doors) unless they are on their hourly rounds of the building. The custodian will have their cell phone (613 978-8040) with them.

The care staff should be notified of any medical emergency, any serious breach of school rules, or issue relating to building security.

Fire Safety Procedures

1) At the start of your shift familiarize yourself with the building plan, egress routes and procedures, attendance log, and the mission plan for your shift. The previous supervisor will go over these with you and you will do the same for your replacement. They also will give you a reflective vest to wear during emergencies.

Astronaut Safety Warden Duties

2) At each shift change, ensure that mission control logs the change in astronaut and simulator student safety warden. The student astronaut safety warden duty is incorporated into the simulation process. You just need to know that they understand that they have taken on that responsibility. They will conduct an assessment of the state of the spacecraft at the start of their shift as part of that duty (as per point 3 below) and will file a report of this assessment with the mission control flight director.

Supervisor and Simulator Safety Warden Duties

3) At each astronaut shift change, you and the student simulator safety warden should perform your own assessment of the site. You should perform a similar assessment once each hour.

- i) ensure that all egress routes are unobstructed and available for use.
- ii) ensure that there are no open flames in use (candles, smoking, etc.)
- iii) there is no potential short circuits in any electrical devices (e.g., all power cords are kept away from chairs and travel areas; operating equipment is properly assembled)
- iv) all equipment and materials are properly secured if not in use
- v) all ongoing activities are being performed safely and in conjunction with the daily plan
- vi) no ongoing activities are hindering egress routes
- vii) make an assessment of the state of the spacecraft interior using the video camera system.

Evacuation Plan (see figure 1)

1) If you encounter a fire or one is reported to you, initiate an evacuation and pull the alarm as you exit (see figure 2). Walk through each evacuation route to familiarize yourself with the route and location of alarm box at the start of your shift. Call the custodian as you leave the building (cell phone speed dial).

2) In the event that the fire alarm sounds, initiate an evacuation.

3) a) **TO INITIATE AN EVACUATION**, calmly shout “fire, fire, fire; evacuate the building.”

b) Make sure to bring this supervisor folder (including attendance log) and your reflective vest.

c) Ensure that any sleeping student is awakened and that all students in the simulator and mission control areas are proceeding to the exit. Make sure to check the simulator area.

d) Walk to the spacecraft bunk room door and ensure that it and the door to the store room are open. Repeat your call of “fire, fire, fire; evacuate the building.”

e) Check to that there are no students in the store room. Count off all 6 astronauts as they exit past you.

f) Perform a quick walk-through of the spacecraft as a final check for students (see figure 1).

- check each bunk as you pass through the bunk room
- check the toilet room, control room, mechanical room, and lab, after you enter the kitchen
- proceed through the airlock door to the planetary surface
- walk through the planetary surface area (turn to the right out the airlock door)
- go through the swinging door back into mission control and follow the students out the building
- close all doors behind you.

g) Check off the attendance log to account for each student once at the assembly point.

Evacuation Routes (figure 2)

Primary Exit: The primary exit is *to the left as you exit the room*, right through the double doors at the top of the ramp leading to the washrooms, and an immediate left through the stairwell to the exit doors. The assembly point is in the Quickie Mart across Albert street or the Albert at Bay Suite Hotel if the Quickie is closed. Check all students against the attendance log.

Secondary Exit: The alternate exit is *to the right as you exit the room*, left through the double doors, and right into the stairwell at the base of the short flight of stairs by the elevator. Once across the street from the school check each student against the attendance log and proceed to the assembly point on Albert Street.

Figure 1: Room W027 Evacuation Check Route for adult supervisor.

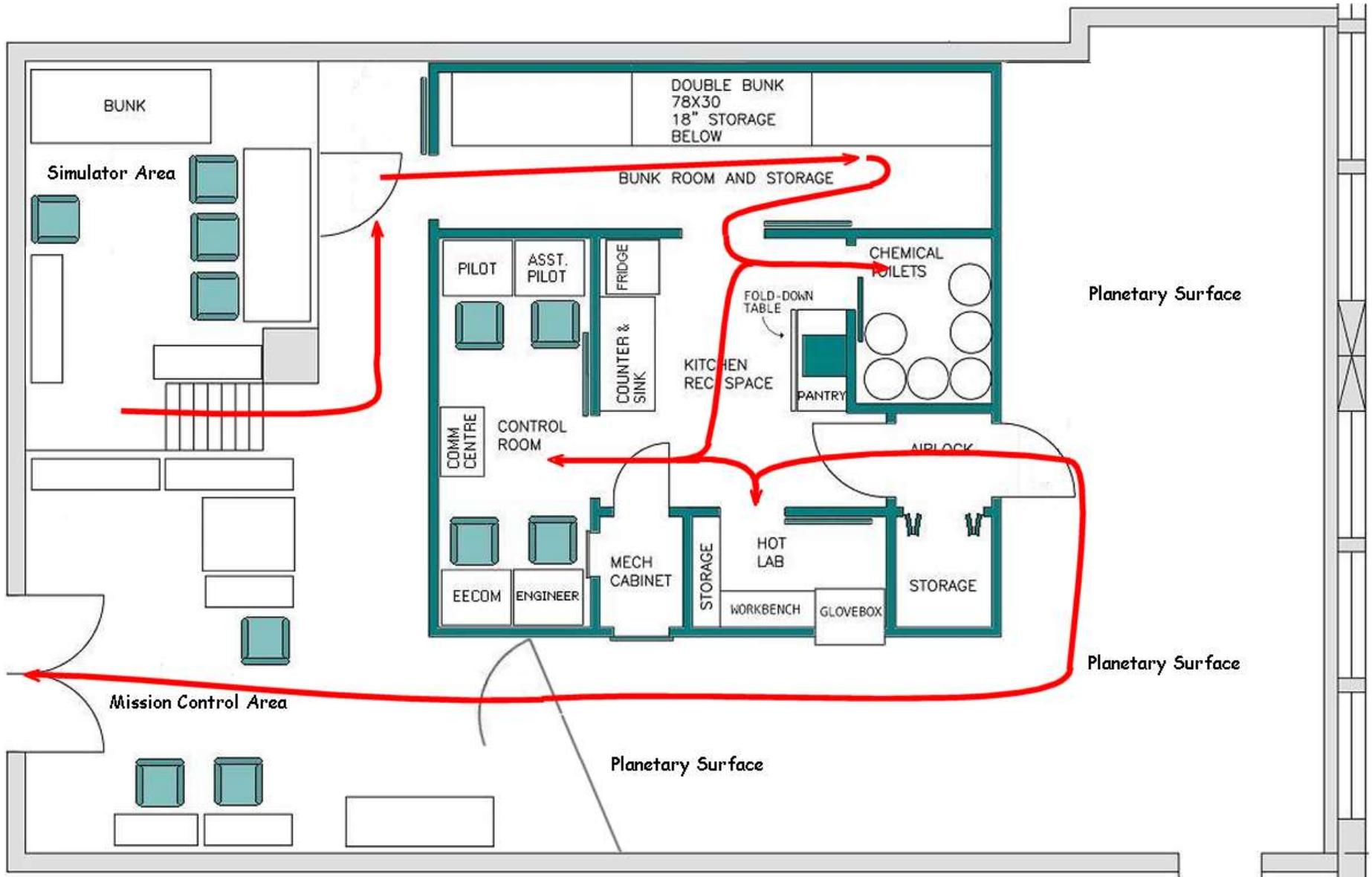
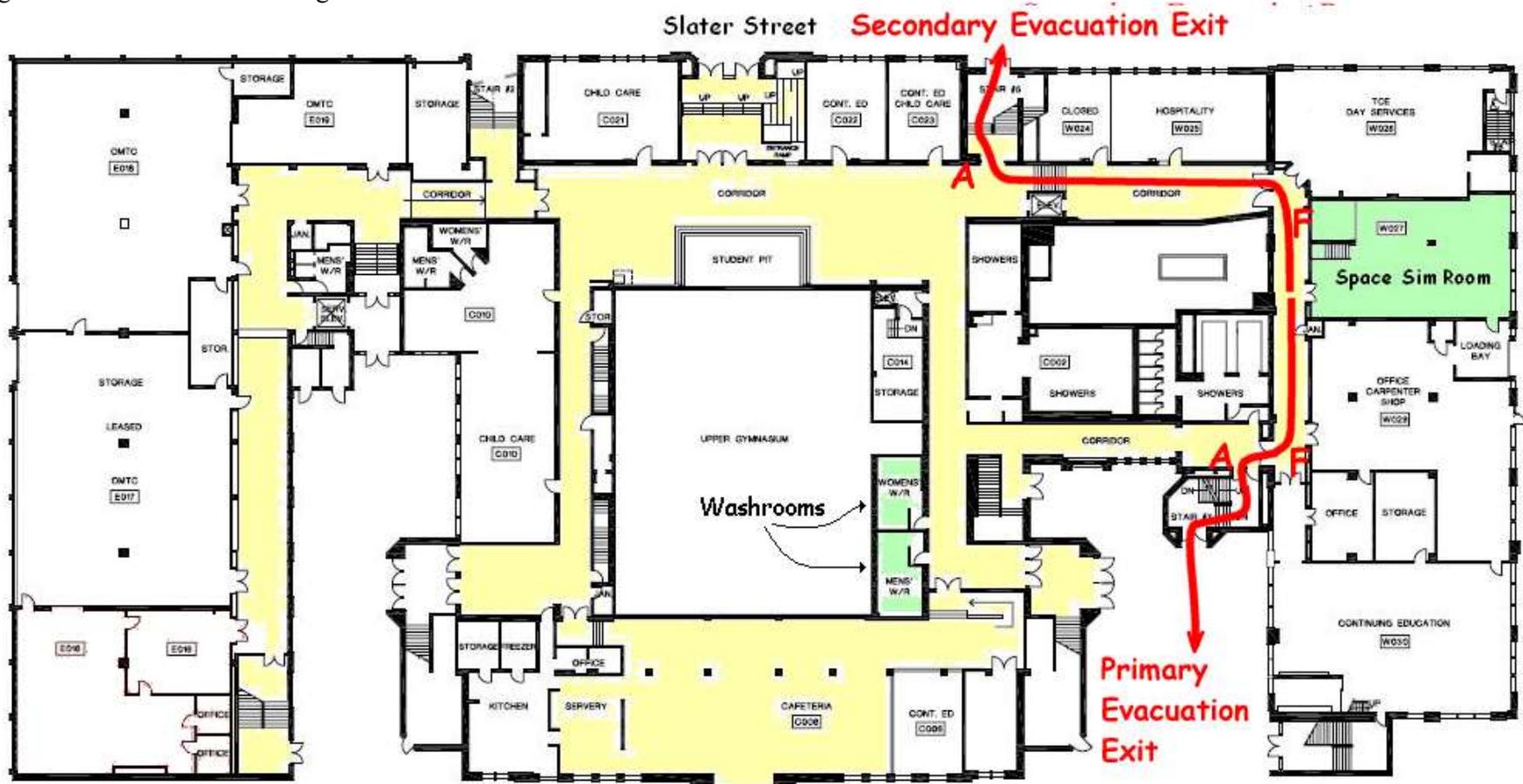


Figure 2: 440 Albert St. Building and Evacuation Plan



Albert Street

Hotel Entrance

Quickie Entrance

A: Fire Alarm Pull Box

F: Fire Extinguisher

Attendance Log

All student activities under your supervision will take place in room W027 at 440 Albert St.

Each student should check in with you as they arrive for their shift and check out with you when they leave at the end of their shift. Students must let you know when they leave the room and where they are going (washroom breaks, for example). Students may leave the building to go to the Quickie Mart, but this should be noted on your attendance log.

Mission control and simulator students can spend brief periods of time in the hallway right outside the door, if they obtain your approval. Other than washroom breaks and brief trips to the Quickie Mart on the other side of Albert St., they should remain in room W027 for the duration of their duty shift at which time they should leave the building to go home or to school.

Students should not leave the building between the hours of 10 PM and 7 AM, unless being picked up by a parent or unless other arrangements that have been communicated to you from their parents. Trips to the Quickie Mart across the street should not take place after 8 PM. If a student needs to leave the building temporarily for any other reason, they must notify a parent and be logged out on the attendance log.

Exterior doors are locked starting at between 8 PM and 10 PM and remain locked until around 7 AM.

Please look over the building and room maps to familiarize yourself with the layout of the space. Feel free to stay either on the simulator balcony or in the mission control area to observe the activities.

There is Wifi available during the day, but it gets turned off after 10 PM.

There also is a wired internet link on the simulator balcony; the students can show you how to access it.

Student Schedule

An attendance will be kept as part of this package so that you know who is present at any time.

The astronauts will be present at all times:

- Mission Commander (name to be released)
- Mission Pilot (name to be released)
- Mission Engineering Spec. (name to be released)
- Mission EECOM Spec. (name to be released)
- Science Specialist (name to be released)
- Science Specialist (name to be released)

They will be in the habitat spacecraft at all times once the mission starts, except when simulating extra-vehicular activities in their EVA suits. You may elect to observe these activities directly, but please try to remain out of sight of the astronauts. When they are in the habitat spacecraft, you should be able to monitor their activities over the video system and by monitoring the audio system. Please ask the students to assist you if you feel the need to observe anything in particular.

Other Student Groups

Over-night mission control staff will stay in the mission control area by the door to the hallway. They will arrive shortly after 9 PM when the Lisgar mission control room closes down.

The simulators will be on the balcony most often but will move around the rest of the room as well. A schedule of these shifts will included and be posted.

All students should sign in with you when arriving and sign out when leaving using the attendance log.

If you have any questions or concerns, please feel free to call Dr. Magwood.

Building Security

Your supervision duties involve room W027 and the adjoining hallway when our students are there. The on-site custodian is responsible for building security at all times and will conduct regular patrols of the doors and building site at night. All refuse should be placed in the container by the door to the hallway. It will be picked up at regular intervals during the day. Please call the custodian for any concerns related to building security.

Vehicles in the Parking Lot

Please sign in your vehicle in the main office if you are using the Slater Street parking lot during the school day. This is in room E121, one floor up on the far side of the building. You may send a student to do this.

2020 Spacesim Mission to Mars: Jezero Crater Watershed Channels
Room 414 Lisgar Collegiate Adult Supervisor

Thank you for helping to supervise the mission control room for the mission this year.
Your participation makes the process possible.

All students participating in the activity should be signed in on the daily sign-in sheet. Any other students should leave the building.

Your primary responsibility is to ensure student safety.

All of the students in mission control are monitoring computer telemetry, conducting research, and communicating with astronauts at 440 Albert St. As such, there is little likelihood of anything happening that would require your intervention.

Please check in with the adult supervisor at 440 Albert St. to let them know that you have arrived and to set up a line of communication should it be necessary to confer with each other.
The cell number for the 440 Albert St. site is **613 513-8639**

Contacting the Teacher Advisor 613 415-4869

Care Staff

The building care staff will be in the building at all times.

They can be reached at: **613 913-6655**

The care staff should be notified of any medical emergency, any serious breach of school rules, or building security.

All student activities under your supervision will take place in room 414 at Lisgar. Mission control students should stay there except for washroom breaks. There are washrooms in the centre of the building on the third floor.

When the shift is over at 8 PM the students will communicate with the mission control setup at 440 Albert. St. to transfer mission control to that site. Once the students there verify that the transfer of control has been completed, the students at Lisgar can shut down the computers and turn out the lights. The door to the room should remain unlocked.

Please accompany the students out of the building and call the custodian to let them know that you have vacated the building for the night.

Emergencies

In an emergency requiring the evacuation of the building, bring this sheet and the sign-in sheets with you.

Your primary exit route is down the stairs opposite the door to the mission control room. Please proceed to the rear entrance door and exit the building. If exiting the back of the building is not advised, proceed to the front exit on the second floor.

The alternate exit is the stairwell at the far east end of the building.

City hall is the designated shelter during an evacuation. Verify that all students on the sign-in sheet are present and call the custodian to let them know that you are out of the building.

Thanks again and please call me if you are unsure of anything.

Jim Magwood