



NORTHERN IMAGES MISSION



MISSION DATA COLLECTION

ABOUT THE MISSION

The Northern Images Mission is one of three missions that will be flown by AuroraSat-1, NWT's first satellite. The other missions are the Northern Voices Mission and Northern Games Mission.

For the Northern Images Mission, AuroraSat-1 will have a small screen attached to it. This screen will display pictures while a camera on the satellite takes pictures on it. The screen is about the size of that on a smartwatch or older iPod. Along with the screen is a camera, the same size as a webcam. The camera's job is to take pictures of the artwork on the screen with the earth in the background. The image to the right shows a sample picture, the screen taking up the lower half of the camera.



Figure 1 Sample Northern Images Mission Photo

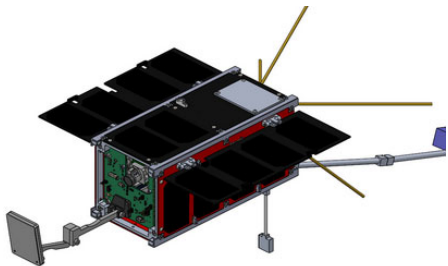


Figure 2 AuroraSat-1 Computer Rendering

ABOUT THE PAYLOAD

The part of the satellite responsible for completing the Northern Images Mission is called the Northern Images Payload. This payload fits onto the front of AuroraSat. To the left is a picture of the complete AuroraSat with the screen of the Northern Images Payload sticking out the front (to the left).

HOW DOES IT WORK?

One thousand pieces of artwork will be loaded to the satellite before it is launched. The satellite will start to take pictures of the artworks about 1 week after it gets into orbit. Each picture is then transmitted back to earth using a radio built into the satellite. The Northern Images DemoSat (seen below) is a model of the satellite. The DemoSat can accomplish all parts of the Northern Images Mission, but is also easy to build and can be worked like a normal camera.

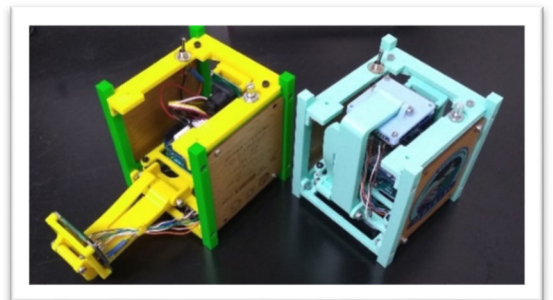


Figure 3 Northern Images DemoSat

HOW TO GET INVOLVED?

If you would like contribute artwork to the Northern Images Mission, you can follow the instructions on the second page of this pamphlet! If you are looking for inspiration, maybe draw a picture of a camp you visited, or maybe your favourite animal, you can be as creative as you want within the size of the screen!

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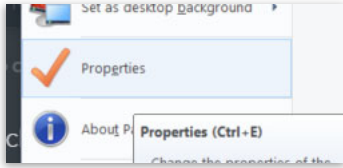


CREATING ARTWORK FOR THE SATELLITE

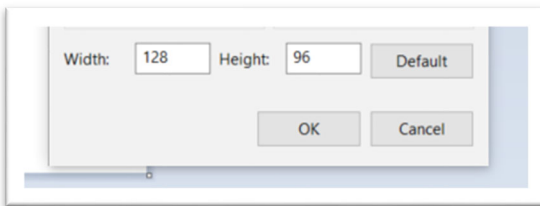
There are two options for creating artwork for the satellite. The first is by using MS Paint, and the second is by using PIXILART.COM. Follow the instructions of your teacher to select the correct program. The sections below guide you through the process of creating artwork for the Northern Images Mission.

MS PAINT

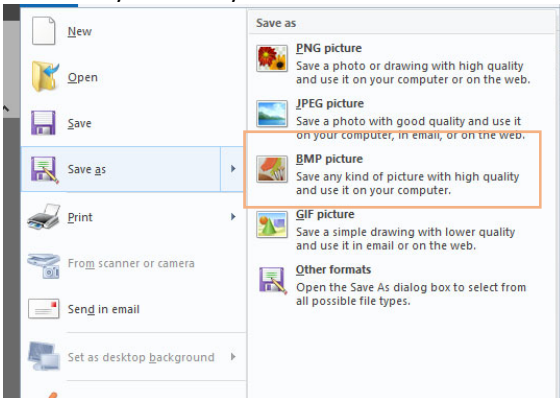
1. Open MS Paint.
2. Go to 'File' and 'Properties'



3. Change the 'Width:' to 128 and the 'Height:' to 96 and click 'OK'.

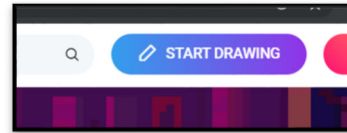


4. Draw your artwork!
5. Save the file as a '.BMP' when you are done. Make the file name, your first and last name along with the community in which you live.

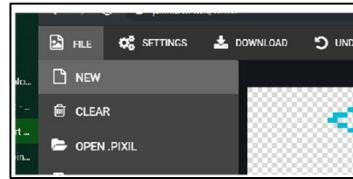


PIXILART.COM

1. Open an internet browser and go to 'pixilart.com'.
2. Click 'Start Drawing'.



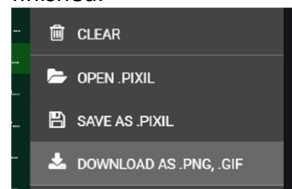
3. Click 'File' then select 'New'.



4. Create a new drawing with a Width of 128 and Height of 96.

Width (px)
128
Height (px)
96

5. Draw your artwork!
6. Click 'File' then select 'Download' when you are finished.



7. Save the file onto your computer and make the filename include your first and last name as well as the community in which you live.

ONCE YOU HAVE CREATED YOUR ARTWORK:

1. Get your guardian to complete the artwork waiver and information form. (If you don't have these, ask your teacher)
2. Ask your teacher or guardian to send the complete package to the Aurora Research Institute (cubesat@nwtresearch.com):
 - File of the Artwork You Created.
 - Scanned Artwork Waiver.
 - Scanned Information Form.

THANKYOU!

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