

EVA Report:

EVA #8

Crew members: Jeremy RABINEAU (EVA leader), Louis MALLER and Arthur LILLO (EVA buddies)

Location: Around the Hab (12S-518155E-425052N)

Time: departure at 9:31 a.m.

Duration: 1 hour 50 minutes

Purposes:

- Rock Mass Rating

Determination of suitability for construction of a tunnel (for Heidi Beemer experiment)

HabCom: Camille GONTIER

9:31 a.m.: EVA #8 leaves the Main Airlock

9:33 a.m.: Measure the level of water in the static tank (38.5 inches from the top)

9:35 a.m.: Observation that the weather is cloudy; it is then not possible to set up MOMA experiment

9:36 a.m.: EVA #8 takes the Main Road to reach the RMR site (400m south of the Hab)

9:44 a.m.: EVA #8 arrives at RMR site

9:47 a.m.: The Camera is set up to shoot the operations

9:49 a.m.: Start of the operations for RMR

10:33 a.m.: End of the operations for RMR

10:40 a.m.: EVA#8 goes to the North to take some pictures

11:05 a.m.: As the weather is better, MOMA is set up outside of the Hab

11:07 a.m.: Little objects are set up on a hill for future experiments with CRV

11.18 a.m.: EVA #8 goes back to the Main Airlock

Summary:

This EVA was part of RMR experiment, led by Heidi Beemer. Its purpose is to determine the effects of perceived stress, isolation, and team efficacy on task performance of Analog Astronauts during a Martian simulation at the MDRS. In particular, the team was asked to evaluate the suitability of an outcrop for construction of a tunnel to be used as shelter.

To do so, the three crew members taking part in EVA #8 have prepared the experiment for the last three days by reading the RMR Task Manual over and over again. The different roles assigned for this mission were the following: Navigator (Jérémy RABINEAU), Geologist (Arthur LILLO) and Recorder (Louis MALLER).

It was quite funny for all of us to perform this task, as that is now quite a long time that we stopped learning geology. And even if we had some difficulties regarding one or two steps of the procedure, I think we managed to do it quite well.

According to the results of the measures, the outcrop is made of "Poor Rock" (Class IV) whose rating is 33%. That means that it is not really suitable for construction of a tunnel.

Once this geology experiment was finished, we found a good place to take some pictures with many different flags and the Hab in the background.

Finally, we set up MOMA experiment under the sun light near the Hab and put some objects on a hill to be recognized by the CRV during a future EVA.