

EVA Report:

EVA #3

Crew members: Arthur LILLO (EVA leader), Mehdi SCOUBEAU and Jeremy RABINEAU

Location:

Around the Hab (12S-518437E-4251432N)

Time: departure at 9:40 a.m.

Duration: 1 hour 50 minutes

Purposes:

- Around the Hab exploration
- ATV testing + training for the newcomers
- Project EMUI:
 - Testing by another crewmember
- Project CRV:
 - Exploration
 - Further testing of new wireless camera
 - Test of radio repeater
- Project Embedded Recording Interface for EVA
 - Test of the recording of the data during EVA

HabCom: Camille GONTIER

9:43 a.m.: CRV is taken outside of the Engineering Airlock

9:48 a.m.: The parts in the resupply vehicle are put in the Engineering Airlock

9:55 a.m.: EVA#3 tested the ATV in vain

10:00 a.m.: EVA#3 goes South-East

10:35 a.m.: Hab lost radio contact with EVA#3

10:40 a.m.: EVA#3 on a hill testing CRV

11:05 a.m.: Decision of EVA#3 to take the direction of the Hab

11:15 a.m.: Radio contact between the Hab and EVA#3 reestablished

11:30 a.m.: EVA#3 entered Airlock

Summary:

After taking the CRV outside of the Engineering Airlock, we took all the extra spacesuit parts outside of the resupply vehicle from Phobos that landed in front of the Hab yesterday. We transferred them to the Engineering Airlock.

Then we tested the ATV #2, 3 and 4: ATV#2 did not react, ATV#3 started and stopped instantly, and the starter of ATV#4 made a weird noise.

We went South on the main road for about 800m, then turn left to reach the coordinates given by our contact on Earth, North-East of the place where we left the road. The AR glasses that Arthur was wearing kept

reacting every time he made a step, due to the new activation method based on head shaking, maybe too sensitive. We quickly lost radio contact with the Hab and were on our own.

While we were climbing a small hill following the dried up bed of a stream, Jeremy fell in a small hole in the ground that he had not seen due to the fog on his helmet. Hopefully, he was not harmed and his life-support equipment was not damaged. On top of the hill, we checked the radio contact with the Hab in vain. We also checked the good functioning of the box “Embedded Recording Interface for EVA” attached to Jeremy’s backpack. Mehdi stood in a flat area to film and take pictures while Jeremy and Arthur went further to test the CRV on the side of the hill. It worked perfectly well beside the fact that it was a bit difficult to turn on the camera of the CRV with the gloves on. Arthur tried the vocal command of the AR glasses, it did not work. But the glasses were very useful as they displayed the time.

We spotted a very red area down the hill; it could be interesting to explore it during another EVA. Despite the altitude of our position, we could not evaluate an alternative way to come back to the Hab, so we basically took the same path backwards to come home. We reestablished radio contact with the Hab very lately, only 100m away from it, when we had it in sight. We were glad to hear our crewmembers again after such a long silence from HabCom.

EVA Report:

EVA #3B

Crew members: Mohammad IRANMANESH (EVA leader) and Camille GONTIER

Location:

Around the Hab (12S-518437E-4251432N)

Time: departure at 4:30 p.m.

Duration: 30 minutes

Purposes:

- Retrieve heater filter and food supplies from Phobos
- Test ATVs with new instructions

HabCom: Louis MALLER (Crew Engineer)

4:33 p.m.: Leaving Airlock

4:36 a.m.: Opening Engineering Airlock to put supplies

4:45 p.m.: EVA#3B testing the ATVs with new instructions provided by Crew Engineer

4:55 p.m.: Crew Engineer reminds EVA#3B to turn red lever to off position before coming back to HAB
4:58 p.m.: EVA#3B back to main airlock

Summary:

Supplies retrieved successfully. Then ATVs were tested. ATV 2&3 by Camille and ATV 4 and the red Honda by Mohammad. See Engineering Report for details of ATV status.