

Commander report

Date: March 23, 2015

Hello Earth !

Only three people left in the Hab. As you can imagine, there are a lot of daily tasks to share between us three in addition to our scientific projects. But fortunately we have some of the more efficient crew members ever: see the list of ongoing projects at the MDRS by crew 151:

- Telesurgery Experiment

The baseline test was done last week. Tomorrow we will do another test to see how much information we have retained. By the end of the week, we will try again this time with instructions on the smart glasses.

- Medical EVA

We had one last week when we tried to save a dummy astronaut. This week, the rescue team will try to localize the astronaut thanks to the onboard camera of our UAV.

- LOCARD (Localization and Radio Relay Drone)

The concept was proved but too much wind to keep the UAV stable in the air. There was an issue with the small wifi repeater as well, but we have one back up that will have to be set again.

- Cliff Reconnaissance Vehicule/Thingz Module

We encountered some issues with the transport of the CRV. The interesting locations that we had are far. It is really hard to pack, go to the location, unpack and mount the CRV in only 2h. The modular electronics module by Thingz works well. We managed to easily add humidity and temperature sensors to the CRV to have even more information on the cliffs that are studied. This shows the interest of modular electronics to easily adapt/improve your rover depending on the mission of the day.

- Eyewear User Interface for Mars

Display of Engineering Check Procedures: OK
udio/video recording have been tested.

Chrono/Time left before end of EVA (simulated O2 reserve status): OK

NEW Idea: A wifi camera has been connected to the glasses. So now

- Astronomy Observation

No observation yesterday as it was cloudy and we were tired. But the study of the feasibility of a low cost "Atmosphere Opacity Monitoring System" using the equipment of the Observatory for next year is going well.

- Artistic Project "Les Temps Phantômes"

Each night, the crew watches a surprise video prepared by a French Artist on a different Universe. The day after we try to incorporate in our daily schedule an artistic creation (video, photo montage, ...) on this topic. After "slowness", "blue" and "archipelago" we had "fantom" for today. As you can tell by Susan's Journalist Reports, we really enjoy those creative activities.

- White Paper on Leadership in Extreme Environment

This rotating commandership is a great opportunity to look at other people's way of leadership and comparing our way to others. We work about 1h every day on the paper. The structure is set and we had some great discussion. I am sure the result will be interesting.

Add to all this Yoga, Meditation and delicious dishes cooked every day!

Cheers from Mars!

Mohammad IRANMANESH, crew commander

Engineering Report

Date: March 23, 2015

Crew Engineer Name: Mehdi Scoubeau

Diesel – 75%

Propane – 55%

Gasoline – 10 gallons in tank

Water (trailer) – distance from top: 68 cm
Water (static) – distance from top: 36 cm
Trailer to Static Pump used - yes
Water (loft) – 22 gallons
Static to Loft Pump used – yes

Atv # Oil Checked: ATV1 and ATV4 to be filled tomorrow (we were already late when we came back from EVA)

Atv # Fuel Used Gals: we will fill the tanks tomorrow during the engineering check and I will report the used gals

Atv # Tires Status: all ok

Atv # Hours Used Day: ATV1 and ATV4 for 1h15min

Atv # Notes And Comments: all ok

Summary of Engineering activities:

- I prepared the EVA of tomorrow by cleaning the helmets and the headsets/micros.
- On main generator
- Internet connection via WiFi
- HALpr on

Questions and Concerns to Mission Support:

- Some pages (“record eva plan” and “explore possible eva routes”, for example) on HALpr do not seem to be available because of an “internal server error”.

Thank you,

Mehdi Scoubeau

EVA Report:

EVA#6 with ATV 1 and 4

Crew members: Mohammad Iranmanesh (EVA leader), and Mehdi Scoubeau

Location: “Stacy’s Cake” (12s-519965E-4250992.5N)

Duration: 2 hours

Purposes:

- Project CRV (Cliff Reconnaissance Vehicle):
 - o Scouting to a location used by previous crews with the same vehicle.
 - o Looking for the right place to conduct the experiment

HABCOM: Susan Jewell

9:50 EVA leaved Airlock

10:06 Engineering Check Complete

10:20 EVA Departs

10:45 Checkin with EVA#6

11:00 EVA arrives at first site (Stacy’s Cake)

11:20 Check-in with EVA#6

11:40-12:15 No radio answer

12:23 EVA Checkin OK. Returning to Hab
12:31 EVA arrives back to HAB

Note:

Because of wind, the UAV was not used contrary to what was planned.

The CRV was hard to attach to the ATV and we had to stop to make sure it was holding well several times on the road. ATV#4 also turned off at some point but turned ON again easily.

The road was very bumpy. CRV was damaged on the way (wheels were out of shape). We decided not to use it and only scout the area.

We came back to the HAB from the South to avoid the bumpy road.

The EVA lasted a bit longer than planned but fortunately we still had battery left on the backpacks. Because we were late, the ATV's were not refueled.

Radio with HABCOM was lost for 30min for unknown reasons.