## Commander Report 03/24/2015 Mohammad IRANMANESH

Hello Earth!

9th day on Mars. We start to miss a few things from Earth. In no particular order: familly, a good steak, watching Earth news or simply a warm and comfy sofa to lay on.

Fortunately for us, our busy scheduele prevents us from getting lost in Earth nostalgia. Those extra 37min in the Martian sideral day do not seem to be enough to get all our work done while allowing the crew to rest properly. We will set priorities to do properly what we have time to do instead of trying to get a maximum done to the detriment of guality.

The Medical EVA today went great and the rescure team managed to save an injured astronaut (mannequin).

The lower deck was transformed into a High-Tech Mars Hospital today: EEG, smartglasses, 3D-printed surgical instruments. Everything was there to save the dummy astronaut thanks to telesurgery.

With the Optinvent Smart Glasses a new idea will be tested tomorrow: A camera has been attached to a glove and connected to the glasses via wifi (offline, without internet). So now, no need to turn your head and helmet to see what is behid you, you just have to point your arm in the direction you want and the image will appear on the screen of the smartglasses.

To end this commander report, I would like to confirm the latest result from the Curiosity rover. Our crew has also discovered evidence of nitrates around the Hab. What if MDRS Marsonauts are not the first living things to walk on this planet?

EVA Report by Susan Jewell MD

03/24/2015

EVA #7

Crew members: Susan Jewell (EVA Leader) - ATV 1 Medhi Scoubeau - ATV3 Mohammad Irananmesh - ATV 4

Location: Around the Hab perimeter (12S-518230E-425720N)

Time: Leave Airlock: 10:10 AM Engineer Check Complete: 10:18 AM Departure from Hab 10:20AM

10: 50AM Triage Complete11: 11AM Return to Hab on ATVs11:36 AM Arrive at Hab12:05 AM Enter airlockDuration: 2 hours

## Purposes :

- Scouting, Search and Rescue operation of injured astronaut optimization – Used the ATV's and backboard stretcher attached to back of ATV 2.. SAR team arrived at the injury site with equipments.

- Astronaut Triage and Stabilization (weather permitting will include use UAVs – Successfully performed the triage protocols on the Dummy "Igor" Astronaut. Performed tourniquet and took blood pressure wearing the gloves. Tested out Rope Rescue lift with Igor on the stretcher.

- Evacuation and Transport of astronaut back to hab on back of the ATV.
- Testing SOP procedures- successful.

Cheers Susan

Hello Mission Support,

## **Engineering Report**

Date: March 24, 2015 Crew Engineer Name: Mehdi Scoubeau

Diesel – 74% Propane – 55% Gasoline – 8 gallons in tank Water (trailer) – distance from top: 68 cm Water (static) – distance from top: 45 cm Trailer to Static Pump used - no Water (loft) – 38 gallons Static to Loft Pump used – yes

Atv # Oil Checked: all full

Atv # Fuel Used Gals: 2 gallons (for tomorrow and today)

Atv # Tires Status: all ok

Atv # Hours Used Day: ATV1, ATV3 and ATV4 for 10min

Atv # Notes And Comments: When the engine is cold, ATV3 and 4 stall when we release the throttle lever, is that normal? Once the engine is warm, they work just fine. Maybe they might need maintenance soon.

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

Journalist Report 03/24/2015 Susan Jewell MD

Humans on planetary surface expedition are high risk missions and high probability of serious injuries, for example, falling down a cliff edge or into deep crevices can happen. Our mission today was focused on the next phase of the medical EVA (MEVA) where we where testing the Search and Rescue procedures using the ATVs and backboard stretcher and trying the "Rope Rescue" from a cliff edge. It was difficult

maneuvering around and climbing the cliff gradient carrying the equipment and performing the triage and excavation procedures encumbered with restricted vision from the helmets and the weight of the back packs.

The purpose of performing such procedures is important for testing and developing standard operational procedures or SOPs specifically for planetary surface rescues. When humans finally set foot on the Martian surface and build settlements the idea of traversing the land and traveling distances between settlements will increase the probability of accidents and injuries. It is exciting to think that we might be pioneering a new paradigm...the beginning of the "Integrated Martian Paramedic Astronauts Corp".... using technologies, such as, drones, autonomous rovers and telerobotics to assist the Search and Rescue, Planetary SAR team.

We bought "Igor" safely back to the Hab where the operating table was ready to perform the telesurgery procedures using the Optinvent glasses and the various EEG devices from eMotiv headset and Neuroelectric ENOBIO headcap.

We enjoyed the day with baking banana-raisin cookies and completing the next Universe called "SPEED" for the creative artist project.."Les Temps Fantomes

From Fictionaut:

"...Making Space
Making Space at top speed
Generating more and more space...
All these spaces are a world
Structures – all minor now
Without strength, without parameters...
Delay, desynchronization
Everything is going by worlds now
By bringing things out of darkness, by reactivating the unknown signs of the inner book,
The print of reality
Let rise and observe people as if the past had taken place
Different speeds to access to simultaneous situations
With shared sensations...."

From Martianauts: I'm going fast but I don't get anywhere The faster I go, the further I am Space and Time are Fractals The sooner I go, the fewer Time I have..."

Ad Astra!