**Commander Report**Date: March 19, 2015
Crew Commander Name: Mehdi Scoubeau

As the Innovative Emerging Space Leaders, we are trying for the first time a rotating commandership.  It means every 3-4 days we are going to change Commander and Executive Officer. We had our first commandership handover last night and consequently I am now taking over and Mohammad is my XO. I hope we will do as good a job as Jyothi and Susan did during the 3 first days of our simulation.

We had our first EVA using the ATVs today and one of them suddenly stopped working halfway through our destination. I think the crew as a whole dealt amazingly with the situation. The EVA leader successfully assessed the situation and took the safe decision to head back to the Hab by towing the ATV. The other crew members back at the Hab helped us getting back safely on time.  That is what simulation is all about and I think we handled that well.

Tonight is observation night and I am sure the sky will look amazing from here since it was very clear during the day.

Mehdi Scoubeau

**Journalist report**

Date: March 19, 2015

Susan Jewell

It was an interesting day for our Crew 151 of Innovative Emerging Space Leaders. For the first time at MDRS we are testing the sharing of commandership during the two week mission. Today was the official commandership hand-over of command from crew member/Greenhab Officer, Jyothi Nookula, to new Commander/Crew Engineer, Medhi Scoubeau. who will take over the station until Sunday when Crew Scientist / co-journalist, Mohammad Iranmanesh  will be the next commander until next Wednesday. The last few days of the mission will be led by Health & Safety Officer /co-journalist, Dr Susan Jewell.

The leadership experiences of Crew 151 and task for this innovative approach in studying different commandership and leadership within a confined and isolated environment will be written in the initial white paper draft report. This will be an evolving project and an on-going study at MDRS.

Today’s EVA involving the testing of the Cliff Reconnaissance Vehicle, CRV, and use of  the ATVs was quite a challenge.  The EVA had to be aborted because of an unexpected ATV problem which could not be fixed. Additionally, it was an extremely hot day with no breeze and the risks of exhaustion and dehydration was a concern for the team. The lessons learned from such simulations demonstrates that no matter how well planned a mission the importance of alternative options or contingency plans should always be considered during a planetary surface exploration far from the safety of the Hab and chance of an immediate rescue.

It will be a beautiful evening tonight with clear skies. So plans for an evening of star gazing  is on the schedule for the crew. Relaxing and enjoying the wonders of this Universe at the Musk Observatory is a special treat for all crews at MDRS.

Until we communicate next time have a joyful evening.

From the Martian Astronauts to all Earthlings

Ad Astra!

Susan Jewell

**Engineering Report**
Date: March 19, 2015
Crew Engineer Name: Mehdi Scoubeau

Diesel – 76%
Propane – 56%
Gasoline – 10 gallons in tank
Water (trailer) – distance from top: 25 cm
Water (static) – distance from top: 37 cm
Trailer to Static Pump used - yes
Water (loft) –  23 gallons
Static to Loft Pump used – yes

Atv # Oil Checked: ATV 1,3 and 4 full

Atv # Fuel Used Gals: 2 gallons

Atv # Tires Status: all ok

Atv # Hours Used Day: ATV1 used for 1h and ATV2 used for 30min

Atv # Notes And Comments: ATV 2 seems to have a starter problem. We can’t make it start anymore.

Summary of Engineering activities:

- We filled the ATV tanks that were not filled on Sunday because we received gasoline tanks.

- 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 a “internal server error”.

- The handle and the pipe of the pump used to transfer water from the trailer tank to the static tank might have to be fixed or improved.

Thank you,
Mehdi Scoubeau

**Eva Report**

03/19/2015

Mohammad Iranmanesh

Eva Number: 3

Eva Date: 03/19/2015

Time Slot: laterAM

PURPOSES:

Original goal of the EVA was to reach Stacy's Cake (12S 518230 4250720).

Project CRV:

  -Learning how to attach CRV to the ATV

  -Scouting a location used by previous crews to test the same vehicule

Project LOCARD:

  - Stability test of the UAV with extra payload installed (repeater) if enough time.

Narrative:

CREW MEMBERS: Mohammad IRANMANESH (EVA leader) and Mehdi SCOUBEAU (EVA buddy)

END OF ENGINEERING CHECK AND EVA START: 10:22 a.m.

DURATION: 1:48 hours

HABCOM: Susan JEWELL

9:59    EVA leaves Airlock

10:22  Engineer check complete

10:42  EVA Departs from HAB

10:53  Check with EVA#3: ATV2 has stopped working.

11:02  No com with EVA#3: out of range?

11:10  Check with EVA#3: ATV issue confirmed.

11:15  Decision of EVA#3 to return to the HAB

11:23  Check with EVA#3 : OK

11: 35  EVA#3 towed back ATV2 to the HAB

12:10  Enter HAB

LOCATION:

Hab (starting Point)                    : 12S 518230 4250720

Stacy's Cake (Original Target) : 12S 518230 4250720

Waypoint 1                                  : 12S 519004 4251691

Waypoint 2                                  : 12S 518839 4251152

Waypoint 3                                  : 12S 518748 4251084

SUMMARY:

Picture of GPS tracking is attached (MDRS151\_EVA3\_03192015\_GPSTRACKING.JPG).

We did not manage to reach original target waypoint (Stacy`s Cake) because of issue with ATV.

EVA#3 took 20 minutes to attach a suitcase (with the drone in) and the CRV to ATV 1 & 2.

On our way ATV#2 started having issues. At WAYPOINT#1 it became clear that it had a starter problem and if it was turned off one more time it would be very difficult to turn it on again. We decided to abort the EVA for safety and come back to the HAB within the oxygen limits (2h). At WAYPOINT#2, ATV#2 broke down and it was impossible to turn it ON again.

We had some communication issues with the HAB, the radio of the EVA leader was working well with the EVA buddy but the HAB could not hear him. Without any information about the capabilities of the ATVs and since EVA#3 was not far from the HAB, it was decided to push the ATV by hand in order to not cause any damage to the working ATV.

By WAYPOINT#3, Mehdi SCOUBEAU radio was able to communicate with the HAB and we got the information that ATV #1 was powerful enough for towing. We manage to attach ATV#2 to ATV#1 and safely bring it back to the HAB.

EVA#3 was back safe around the HAB with Oxygen left at 11:35. The ATV 1 and 2 were parked and ATV 1, 3 and 4 were refueled. Because of the stress and the effort made in the sun, it was decided to go back in the HAB and not continue with the LOCARD UAV test to avoid dehydration.

The mannequin used for the previous medical EVA was retrieved and brought back to the HAB.

