

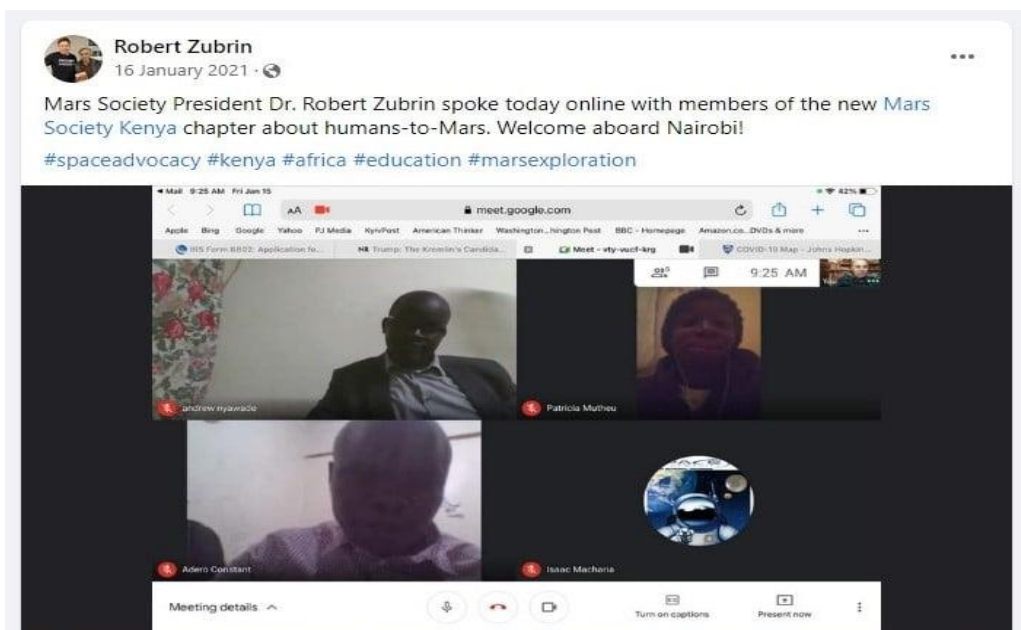
MARS SOCIETY KENYA ANNUAL REPORT 2021

A journey of a thousand miles begins with a single step and for the society; this first step was taken long before our inaugural launch. Such activities include but not limited to creating awareness in the country aimed at preparing the general public to support Humans-to-Mars.

JANUARY: Our President/Founder (Isaac Gathu) was fortunate to have my name included to the list of 10.9 Million Names that flew to Mars aboard NASA's Perseverance Mars Rover. This was part of NASA's 'Send Your Name to Mars' campaign. The names were stenciled onto three microchips along with essays from NASA's 'Name the Rover' contest. Read more about the contest [here](#).



However, no work could have been done without the blessings of the Mars Society President; Dr. Robert Zubrin. Our goal is to promote the space economy in the country with the mission of having Kenyans (humanity) settle on Mars so as to advance terraforming the Red Planet. We owe our sincere gratitude to all that have supported us in one way or the other in seeing to it that this noble venture stands to become a beacon of hope in helping revive and revitalize the space economy in the country. The meeting was informative and the members got the gist of the initiative. Those in attendance were; Isaac Gathu (President/Founder -Mars Society Kenya), Dr. Constant Adero - Chairperson (Lecturer – Technical University of Kenya), Patricia Mutheu – Secretary and Lt. Col. Andrew Nyawade (director, space regulation, exploration and utilization – Kenya Space Agency). We are thankful you could join us. Thank you, Dr. Zubrin for sharing with us.





The Mars Society
11111 W. 8th Ave., Unit A
Lakewood, CO 80215
www.marssociety.org

January 17, 2021

Mars Society Kenya
Inaugural Event Date: January 15, 2021

Re: Official Chapter Recognition Letter for Mars Society Kenya

Dear Friends,

Congratulations! You have just joined a unique group of visionaries as an official chapter of the Mars Society. Thank you for your enthusiastic support for one of the most daring and audacious human endeavors of our time - sending humans to Mars.

The time is right. We can go to Mars. We can explore and even settle the Red Planet. All that is needed is the will, and such conviction comes from people like you.

As the world's largest, most influential advocate for human exploration of the Red Planet, the Mars Society has made great strides in recent years, but so much more remains. We must strengthen our resolve to see sending humans to Mars become a reality.

Thank you again for becoming a part of this generation's greatest cause. Mars is our future.

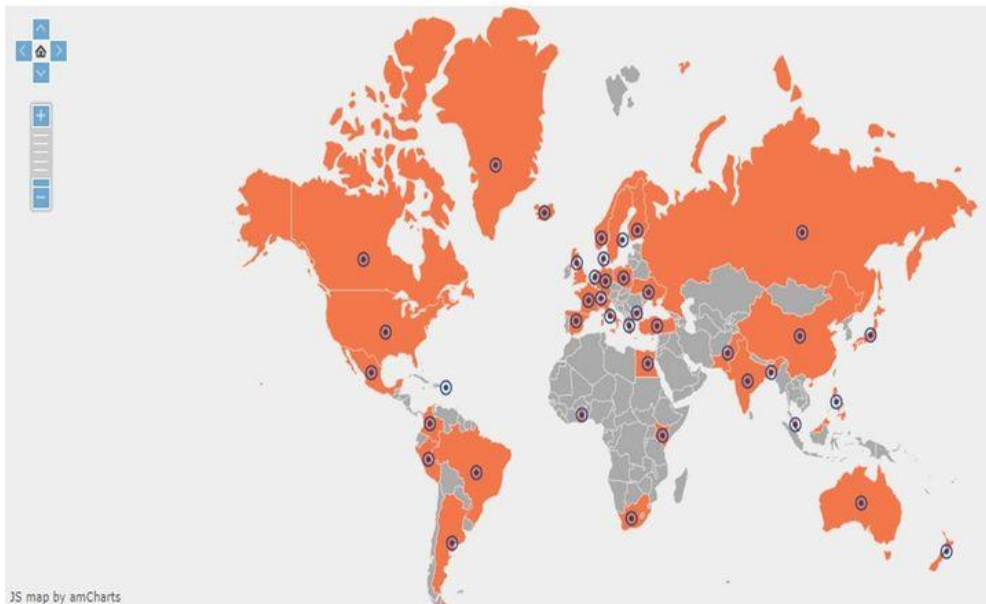
Sincerely,

Dr. Robert Zubrin
Founder and President

Human Exploration and Settlement of Mars

FEBRUARY: Following a successful inaugural event, we were honored to be added into the database of Mars Society Chapters in the world. You can learn more about the Mars Society Chapters [here](#):

Chapters of the Mars Society



See below for full list of Chapters

APRIL: Since the challenge began on April, XPRIZE experts in Climate Change, Energy, Health and Space began working with experienced XPRIZE competition designers to come up with 16 ideas for prizes, with the XPRIZE Community members recommending subdomains; areas of focus within the four domains. Participants were asked to map out the biggest barriers, or challenges, in those domains. Breakthrough solutions for the top barriers will be crowdsourced later in the program. Those breakthroughs will form the basis for prize ideas and the most promising ideas will be developed and awarded a US\$ 10M cash prize to develop the idea. Prize ideas will be reviewed and validated with an assembly of preeminent global leaders during a capstone event.

Isaac Gathu has been leading the team of community members designing ideas around Space, with key interest on Mars Food. This prize would challenge teams to autonomously produce 3,700 calories of food per day (meeting the nutritional requirements of an astronaut) in a Mars-like environment. If we want to colonize Mars, we need to figure out how to grow food there. Read more about the Challenge [here](#):



MAY: We got an Honorable mention from Thomas Olson during Day 2 of Conversations for the Future: Energy and Space Shark Tank event organized by Foundation for the Future. This was after being shortlisted as one of the Finalists for the 1st All-Virtual NewSpace Business Plan Competition. However, due to some technical challenges we could not attend the online event to pitch our ideas hence the honorable mention.

The Center for Space Commerce and Finance, in conjunction with Foundation for the Future and Blue Marble Week, had shortlisted eight Finalists, representing 6 countries from around the world, for the first all-virtual NewSpace Business Plan Competition, held on May 4th-5th, 2021, during the Blue Marble Week series of events. Read more about the competition [here](#):

To watch the day's recording kindly visit <https://youtu.be/5bCdo164j6c> or skip to timestamp 00:19:00 for the honorable mention.

JUNE: Isaac Gathu (the President/Founder of Mars Society Kenya) presented his papers on our idea of a "SPACE BOOT CAMP" during the IAF Global Space Exploration Conference – GLEX 2021 at St. Petersburg, Russia on June 14-18. Mars Society Kenya is working on establishing a Space City. The Space City will be a fully-fledged space academy which will also feature a Mars Simulation Habitat. The manuscript is also our value proposition for the Proposed Future State of the Space economy in Kenya and a clear ROADMAP on how the country can set foot on MARS. This manuscript was made available to the public upon being uploaded in the IAF (International Astronautical Federation) website. Read the entire manuscript [here](#):



09 March 2021

ISAAC GATHU
Kenya Space Agency (KSA)
Kenya

IAF Global Space Exploration Conference – GLEX 2021
St Petersburg, Russian Federation
14 – 18 June 2021

Subject: GLEX 2021 - Notification to Authors


Dear Mr. GATHU,

As Co-Chairs of the International Programme Committee for the IAF Global Space Exploration Conference, we are pleased to inform you that your abstract "**SPACE BOOT CAMP**" has been accepted for a **10-min** oral presentation.

Please find the details hereunder.

Topic:	3. Mars Exploration
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Despite technical hitches, we still managed to get something for the Asteroid Day 2021 where we joined many organizations across Africa in celebrating the day with a number of public events, with the theme focusing on “Exploring space whilst keeping Earth safe.” The event’s recording can be found [here](#):



ASTEROID DAY
30 JUNE

“EXPLORING SPACE WHILST KEEPING EARTH SAFE”

Presented & Hosted by:
Seth Nyawacha
Fred David

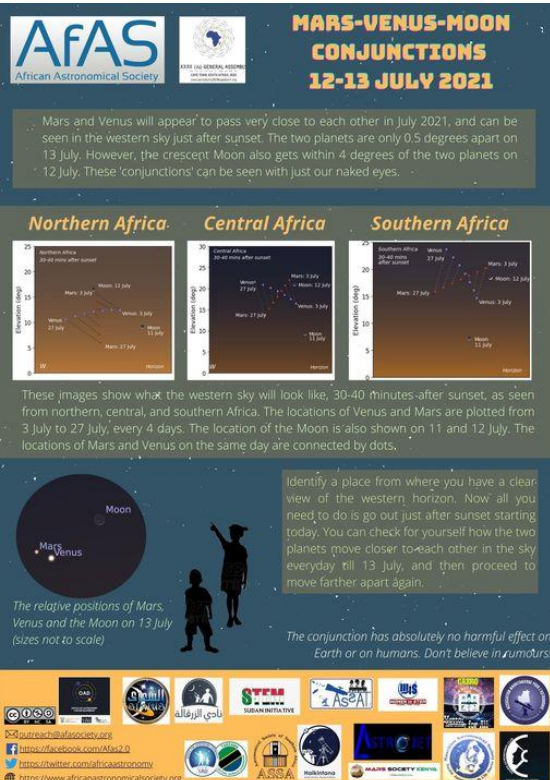
Guest Speaker: Kenneth Mubea

Invited Presenters:
SGAC NPoC Uganda
SGAC NPoC Tanzania
Mars Society Kenya
Kenya Space Agency

2nd July 2021, starting at 2:00pm
<https://join.skype.com/GZnhmTHr2eXb>

Logos for Space Generation Advisory Council, Kenya Space Agency, and Mars Society Kenya are also displayed.

JULY: In collaboration with the African Astronomical Society (AfAS), we organized a sky-watching session across Africa in observing the Mars-Venus-Moon Conjunction.



AfAS
African Astronomical Society

MARS-VENUS-MOON CONJUNCTIONS
12-13 JULY 2021

Mars and Venus will appear to pass very close to each other in July 2021, and can be seen in the western sky just after sunset. The two planets are only 0.5 degrees apart on 13 July. However, the crescent Moon also gets within 4 degrees of the two planets on 12 July. These 'conjunctions' can be seen with just our naked eyes.

Northern Africa: **Central Africa:** **Southern Africa:**

These images show what the western sky will look like, 30-40 minutes after sunset, as seen from northern, central, and southern Africa. The locations of Venus and Mars are plotted from 3 July to 27 July, every 4 days. The location of the Moon is also shown on 11 and 12 July. The locations of Mars and Venus on the same day are connected by dots.

Identify a place from where you have a clear view of the western horizon. Now all you need to do is go out just after sunset starting today. You can check for yourself how the two planets move closer to each other in the sky everyday till 13 July, and then proceed to move farther apart again.

The relative positions of Mars, Venus and the Moon on 13 July (sizes not to scale)

The conjunction has absolutely no harmful effect on Earth or on humans. Don't believe in rumors!

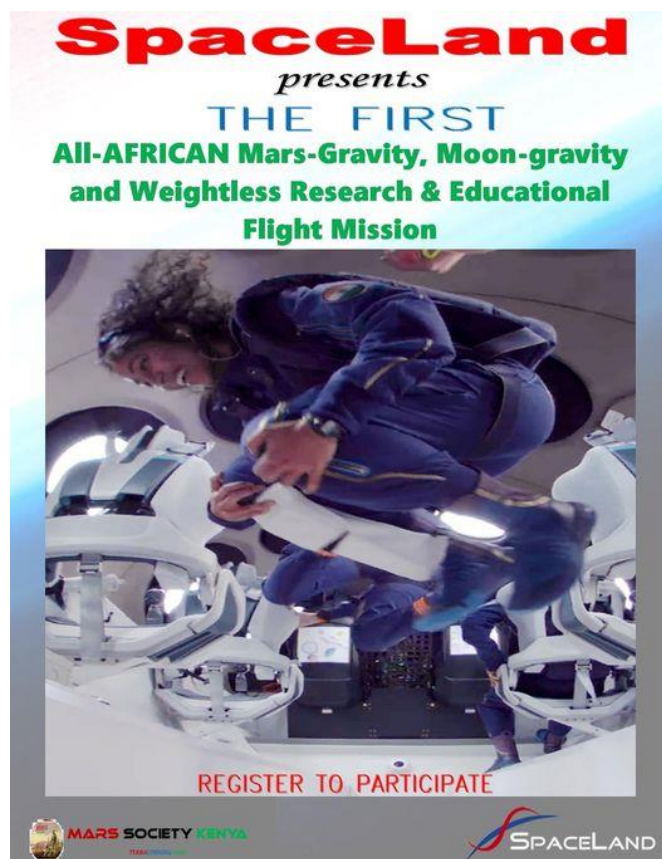
Logos for various African astronomical organizations and social media links are at the bottom.

Following the blessings of Dr. Robert Zubrin to form a chapter of the Mars Society in Kenya and having been recommended of us to register the organization as a University Chapter, our President/Founder, Mr. Isaac Gathu, held a consultative meeting with representatives from both the Technical University of Kenya (Mr. Constant Adero), which was selected as the preferred university of choice for our entry requirements and the Kenya Space Agency (Lt. Col. Andrew Nyawade) where they finalized on the Agreement on collaboration and membership. This paved way for willing members to join and also kickstarts our activities. The session recording can be accessed [here](#):

AUGUST: After months of pitching at various events, we were fortunate to have SpaceLand, Italy accept our offer as a willing investor on of our proposed space city project. This was because they have done a similar project elsewhere and would find it easy duplicating the same in Kenya. Unfortunately they requested a deposit of US\$1M just to get started. It is this amount that to date we have been trying to rise.

The project is expected to be built in 5 phases and the US\$1M is only for the first phase as the rest 4 phases will depend on profits raised from the previous phase(s). The project is also expected to feature a Mars Simulation Habitat, should the African Analog Habitat currently under discussion with our mother organization not be implemented.

It was in the midst of these deliberations that SpaceLand presented to us the idea of space tourism through what they termed as the 1st Mars-Gravity, Moon-Gravity and Weightless Educational / Research Flight with Payloads. The program which is yet to kick off was expected to accommodate each African participant on board their flights taking off from Mauritius for 4900 EUR each including customized microgravity flight suit, re-Gravitation ceremony, videos and images on board and unique gadgets, plus 15 % for 2 day-training on ground and underwater (5900 EUR per participant should the flight operations be held in Kenya, where they can bring the flight vehicle, in this case with a minimum of 40 participants). Payloads can belong to any STEM discipline; payload-related accommodation and operational costs will be quoted according to respective payload volume, mass and interface complexity. More about the program can be found [here](#):



OCTOBER: As accustomed by the global Mars Society, we joined other chapters virtually on October 14-17 for the 2021 24th Annual International Mars Society Convention, with leading experts from the global space community discussing current Mars exploration and plans for a human mission to the Red Planet. This year's theme was "Taking Flight".

During the convention, we managed to get an opportunity to present on our proposed Space City project under the title: Space Boot Camp (A Novelty Space Project). The project aims at creating leverage in Kenya's Space exploration by bringing together fellow Kenyan space actors in reviving and revitalizing Kenyan's space economy. Watch full video [here](#):

We also got to attend the Chapters' Annual General Meeting where we were introduced to the new Chapters' Coordinator; Raksha Kammandore Ravi. During this handing over period, the Chapters had been asked not to submit their Annual Reports as the mother organization was strategizing on better ways of engagement with the Chapters. It is this that led to us delaying in submitting our 2021 Annual Report. We highly apologize for any inconvenience caused.

