

Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

April 2021

Mars Science News

MEPAG chair, Aileen Yingst, presented a 10-minute Mars-community update to the Planetary Science Advisory Committee (PAC), a NASA committee meant to provide objective, publicly accessible advice to the federal government. The presentation ([link here](#)) covered the bevy of spacecraft that have recently arrived at Mars, as well as the discussion and findings from the last MEPAG meeting. The presentation was followed by discussion and Q&A with the PAC members. We encourage interested community members to refer to the [meeting minutes](#) and the [presentation](#).

A tiny helicopter called Ingenuity is tucked under the belly of the Perseverance rover. It weighs just 1.8kg for its size of a box of tissues (body: 5.4 in × 7.7 in × 6.4 in and landing legs: 1 ft 3.1 in), slung underneath a pair of 1.2m carbon fiber rotors. If everything goes according to plan, Ingenuity will become the first aircraft to fly on Mars. Ingenuity's flight will mark the first attempt at a powered, controlled flight of an aircraft on another planetary body.

Mars' very thin atmosphere (just 1% the density of Earth's) makes flying complex, and Ingenuity's power requirements and communications limitations make real-time communication and real-time control impossible. Ingenuity's flights are pre-planned in detail, though the copter is semi-autonomous; it does not have the capability of doing onboard high-level reasoning. The primary goal for Ingenuity is to show that flight on Mars is possible and collect technical data to enable the next generation of Martian rotorcraft, which will be able to do more ambitious and exciting scientific measurements in future missions.

To understand how NASA is making this happen, please see more information on [NASA's webpage](#).

Near-term Due Dates (next three months)

Due	Conference
April 14	5th Planetary Data Workshop – Abstract Deadline
June 23	5th Planetary Data Workshop – Registration Deadline

Upcoming Conferences

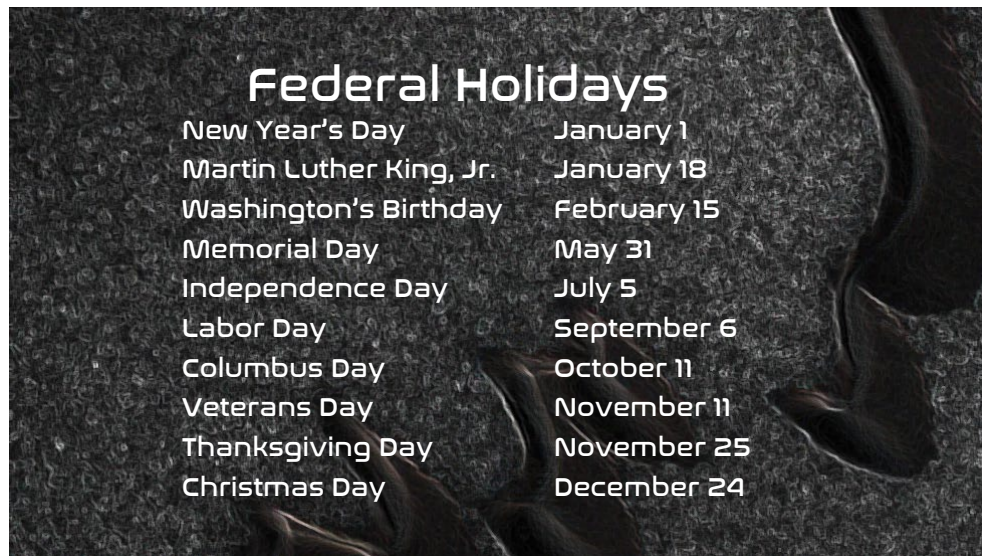
- Note that for civil servants and those under contract with NASA, foreign and NASA-sponsored conferences generally need to be forecasted via NCTS. Forecasting to NCTS is usually due 60 days in advance for domestic meetings. If you are unsure whether an event is a conference or not, or when the deadline may be, please consult with your NASA Center conference forecasting/travel unit.
- We have noted conference changes we are aware of – but the impact of COVID-19 continues to evolve. If we show a conference as still happening in the next few months, it is advisable to check the website and confirm with conference organizers.
- VM = virtual meeting.

2021 First-Second Quarter		
April 19-30, 2021 Virtual Meeting	EGU General Assembly 2021 (vEGU21) https://www.egu2021.eu/	
May 17-20, 2021 Glasgow, Scotland	IEEE Int'l Instrumentation & Measurement Technology Conf. (I2MTC 2021) https://i2mtc2020.ieee-ims.org/	
June 28-July 2, 2021 Flagstaff, AZ	5th Planetary Data Workshop https://www.hou.usra.edu/meetings/planetdata2021/	

Seasons on Mars

	MY36	MY37	MY38
Start of Northern Spring / L_s 0	02/07/2021	12/26/2022	11/12/24
Start of Northern Summer / L_s 90	08/25/2021	07/13/2023	05/29/25
Start of Northern Autumn / L_s 180	02/24/2022	01/12/2024	11/29/25
Start of Northern Winter / L_s 270	07/21/2022	06/07/2024	04/25/26

U.S. Federal holidays to consider when scheduling conferences/workshops/meetings



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Please send Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

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This newsletter (and all previous months') is also posted on the MEPAG website: <http://mepag.jpl.nasa.gov>

If you wish to withdraw from the electronic mailing list that this newsletter is sent out to, please send an email from your email account to mepag-removesignup@jpl.nasa.gov.

To be added to this list and receive this monthly newsletter and other Mars Science announcements, or to update your MEPAG directory information (which contains the email list used for sending out this newsletter), send an email to mepag-signup@jpl.nasa.gov from the email account you'd like added, with your full name and institution.