

Terms of Reference for the Analog Objectives for Artemis Specific Action Team

A LEAG Activity

Requestor:

NASA's Science Mission Directorate Planetary Science Division

Rationale

Across NASA there are numerous human analog activities currently operating or being stood up in preparation for lunar surface Extravehicular Activity (EVAs). These activities come in an array of shapes and sizes from large integrated tests, such as Desert Research and Technology Studies (D-RATS) to focused local activities, such as tools testing in the JSC rock yard, and everything in between.

NASA has developed a leadership team, the Objectives for Human Analogs Team (OHAT), to provide oversight and strategic coordination for our analog activities to maximize their impact and utility and to ensure that the needs of our stakeholder communities, including the lunar science community, are being met to the best of our abilities.

In order for OHAT to fulfill their oversight role, they need to understand the needs and objectives of the stakeholders. To that end, SMD hereby requests the establishment of a Specific Action Team (SAT) by the Lunar Exploration Analysis Group (LEAG) to catalog and prioritize the analog objectives for science and science operations in preparation for Artemis human landings.

Deliverables

AOA-SAT will be asked to present nonbinding findings to NASA in the form of a report. Draft findings will be due no later than Jan 15th 2022. A final report will be due no later than February 1st 2022. The AOA-SAT will execute the following functions on a best-effort basis:

The AOA-SAT will define objectives that can be achieved through analog activities to prepare for maximizing science through Artemis human lunar landings. This list will take into account:

- Priorities – Is the objective necessary for planning or merely useful?
- Time criticality – Is the objective needed for the first landing? Early sortie? Sustained missions? Base Camp?
- Analog requirements – Are specific requirements (hardware, software, facility, personnel, etc.) needed to achieve the objective? Can it be accomplished in the rockyard, in Virtual Reality (VR), small- or large-scale field test? Does it require an integrated science backroom team? Etc.

Membership

AOA-SAT is established as a LEAG activity. Membership shall be comprised of subject matter experts in human and robotic fieldwork, sample collection, handling and curation, data management, and real-time remote science operations.

Membership of the Analog Objectives for Artemis Specific Action Team

Kelsey Young (NASA GSFC) - chair

Members:

Jose Hurtado (UTEP)

Trevor Graff (Jacobs/NASA JSC)

Jen Heldmann (NASA ARC)

Jess Barnes (AZ)

Nick Schmerr (UMD)

Gordon Osinski (UWO/Canada)

Aileen Yingst (PSI)

Ben Feist (Jacobs/NASA JSC)

Executive Secretary: Marie Henderson (UMBC/NASA GSFC)

Ex-Officio Members

Sarah Noble (NASA SMD)

Jake Bleacher (NASA human exploration)

Julie Mitchell (NASA curation)

Amy Fagan (LEAG chair)

CONCURRENCE:

Sarah Noble
LEAG liaison,
Planetary Science Division, Science Mission Directorate

APPROVAL:

Lori S. Glaze, Ph.D.
Director, Planetary Science Division