

NASA's
HUMAN EXPLORATION RESEARCH ANALOG (HERA):
An analog mission for isolation, confinement, and
remote conditions in space exploration scenarios

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4 complete strangers

4 complete strangers

600 square feet

4 complete strangers

600 square feet

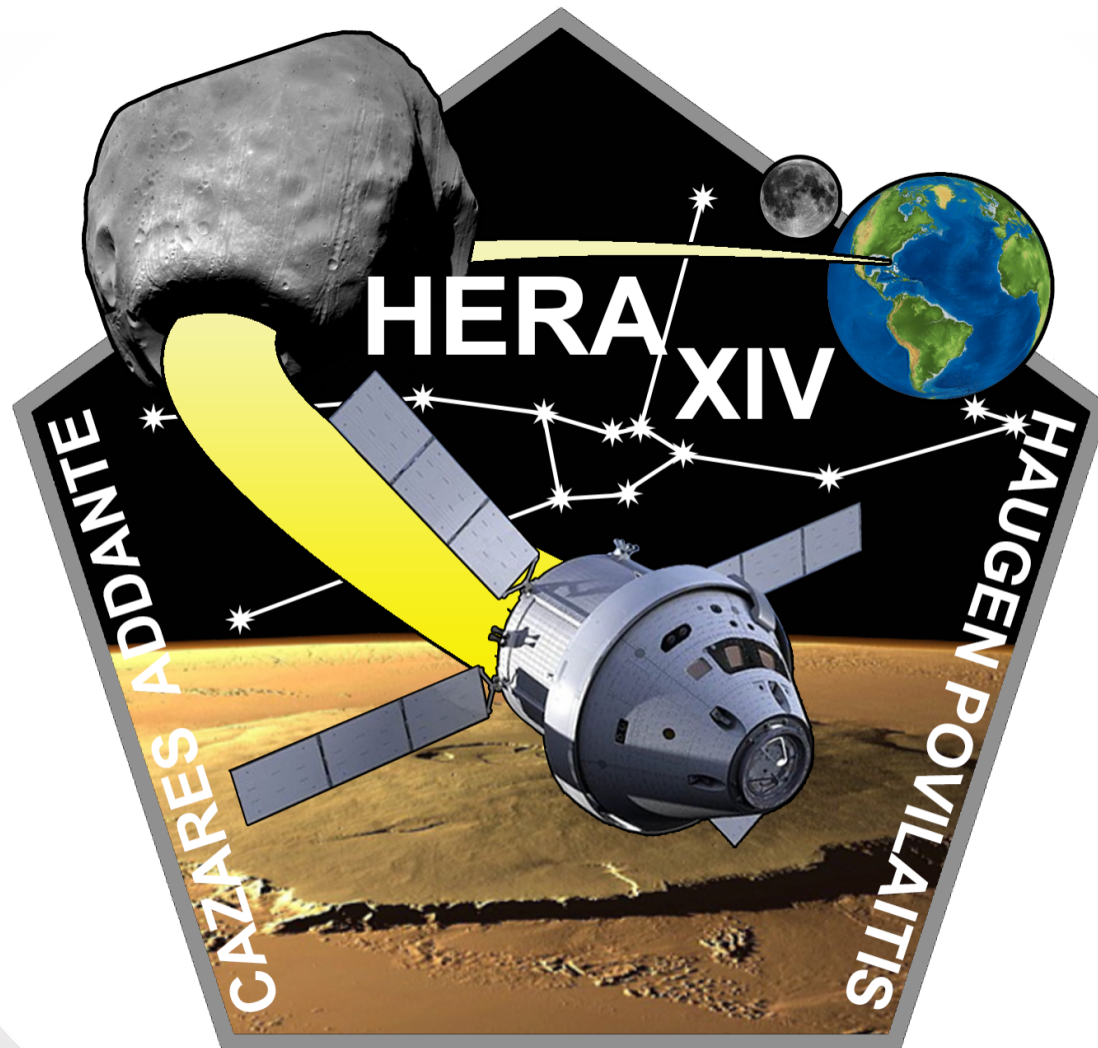
45 days

4 complete strangers

600 square feet

23 ~~45~~ days

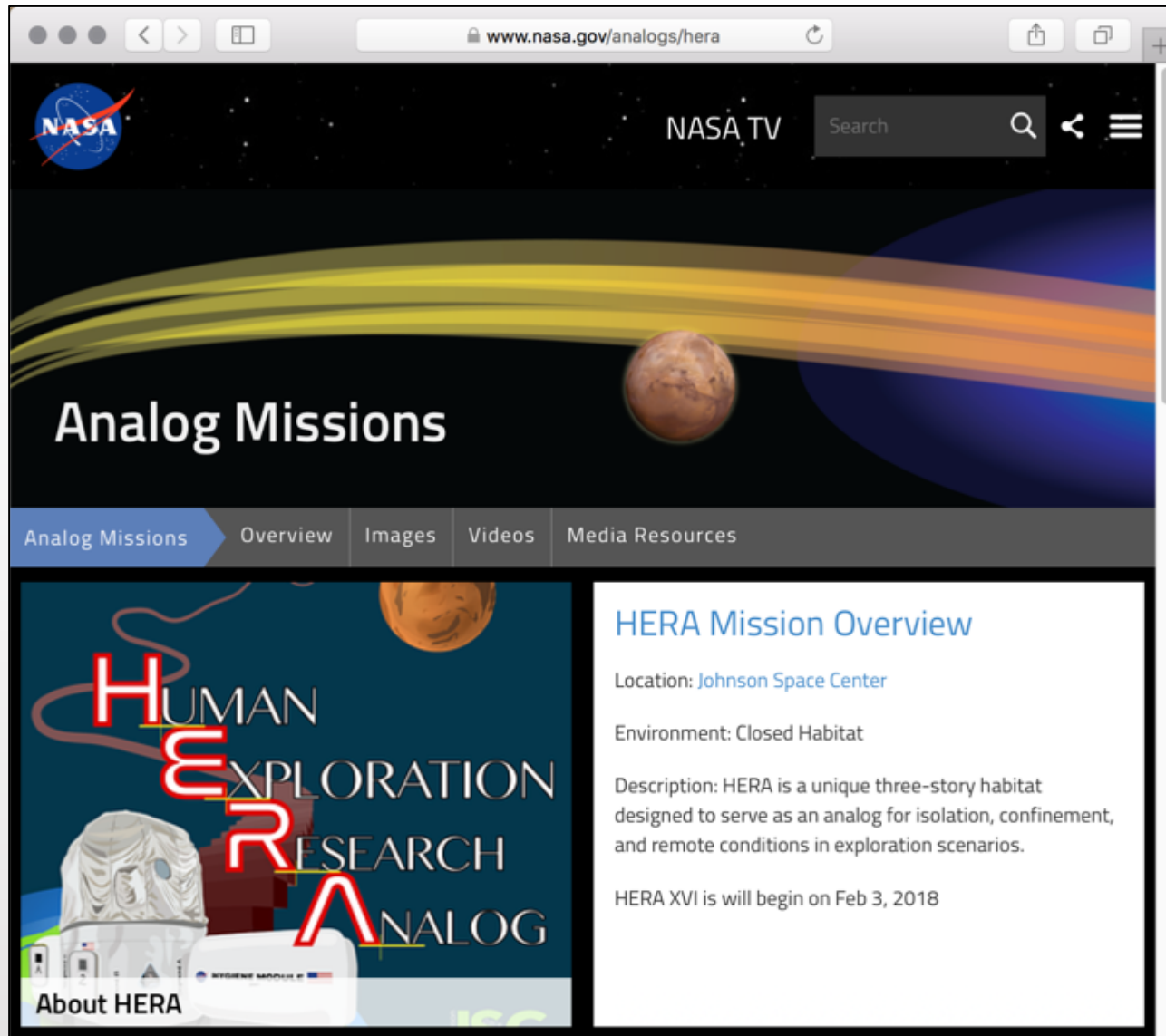
1 Category IV hurricane



Agenda

- **Background**
- HERA XIV
 - Selection
 - Training
 - Mission
 - Debrief
- Questions

Background: What is HERA?

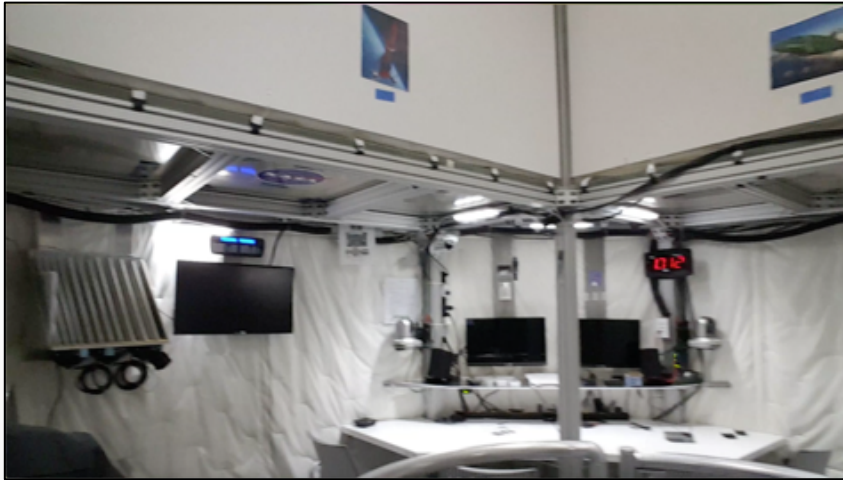


Background: HERA Habitat – Outside



HERA XIV, 2017

Background: HERA Habitat – Inside



Courtesy of Dr. Tess Caswell, HERA XI, 2016

https://www.youtube.com/watch?v=ei_PHbRAZrg


Background: HERA Missions



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HERA XIV: Selection

NASA TV

Analog Missions

[Analog Missions](#)[Overview](#)[Images](#)[Videos](#)[Media Resources](#)

Want to Participate in HERA?

TAP

Be a Human Test Subject

Developing countermeasures for the effects of space flight often requires human subjects to support data collection. The office of Test Subject Screening (TSS) has the primary responsibility to provide qualified test subjects for analog studies. The TSS personnel recruit and maintain detailed tracking of test subject participation in all studies.

Ground-based studies involving human test subjects require the approval by the JSC Institutional Review Board (JSC-IRB). Studies are conducted by many laboratories and flight analogs, such as: cardiovascular, neuroscience, bone and mineral, suit and engineering, exercise, nutrition, immunology labs and the Human Exploration Research Analog (HERA). Test subjects are also provided for astronaut training during phlebotomy training and visual acuity protocols.

Principal Investigators requesting a test subject for a study can contact TSS or obtain the request form at the [IRB website](#). TSS for information regarding the test subject program.

Volunteers wishing to become test subjects should [email](#) their CV to the email address below, or contact us at:

- Jsc-hera@mail.nasa.gov
- 281-212-1492


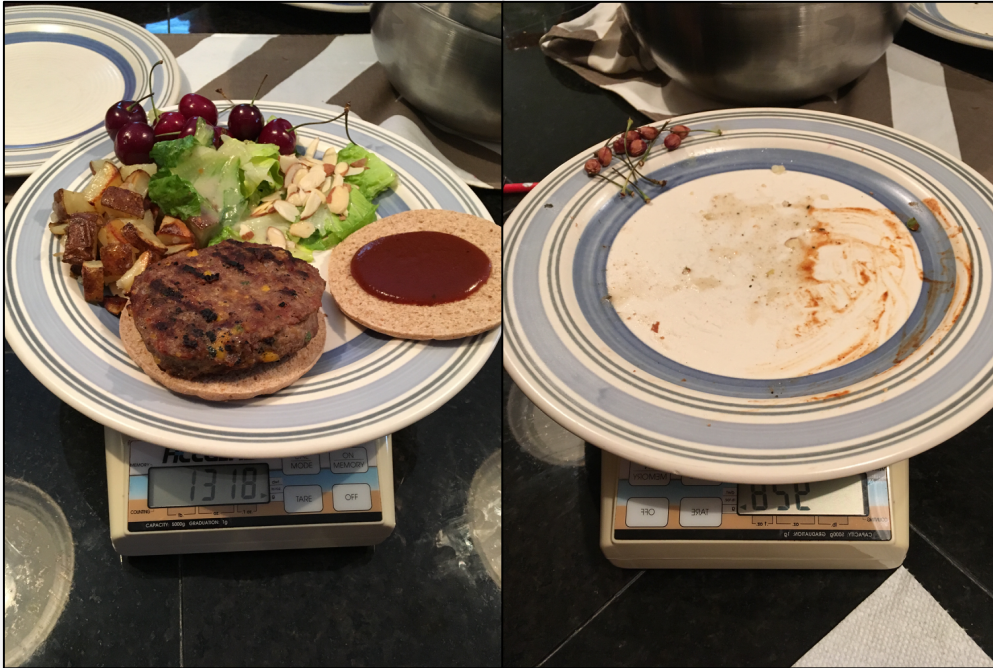


Photo Date: 5-2-2016.Location: Bldg. 220 - HERA.Subject: Crew photo for HERA 10 crew..Photographer: Bill Stafford

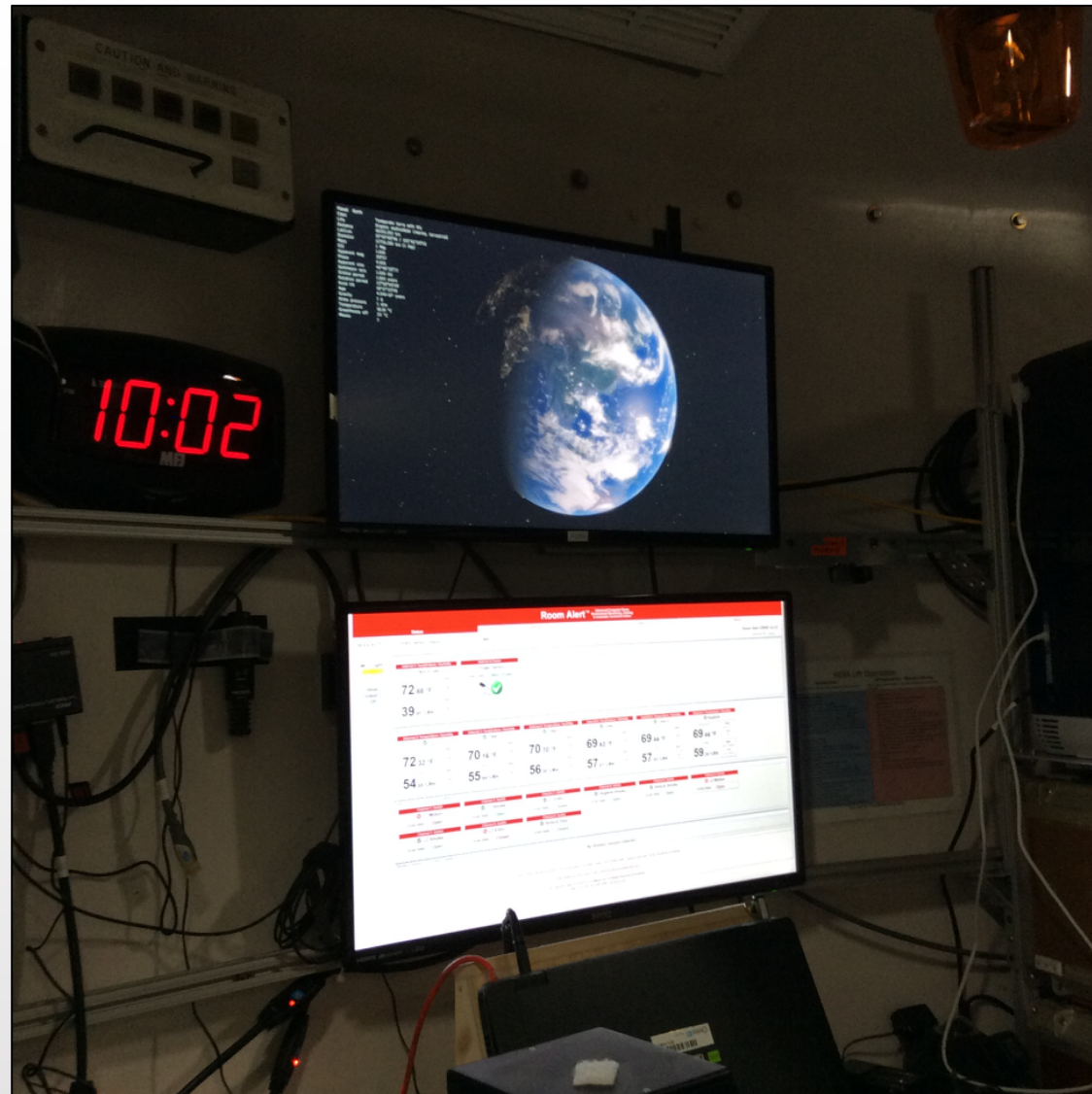
HERA XIV: Training



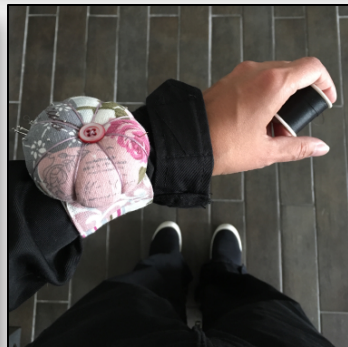
HERA XIV: Training



HERA XIV: Mission – Liftoff



HERA XIV: Mission – Dress



HERA XIV: Mission – Food



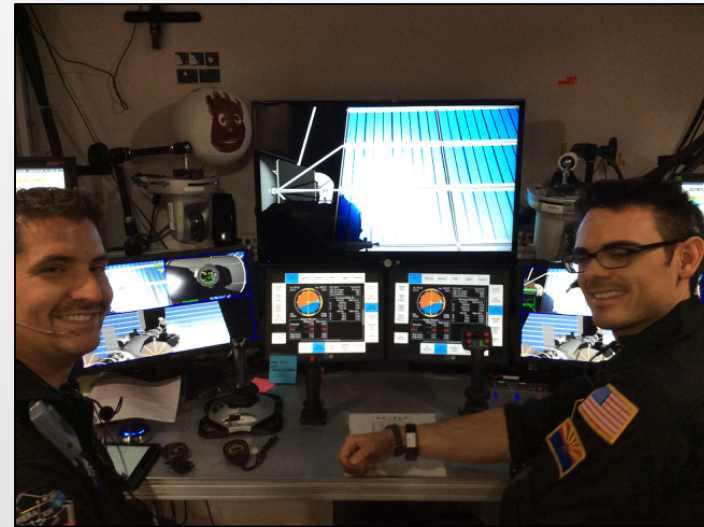
HERA XIV: Mission – Exercise



HERA XIV: Mission – Sleep



HERA XIV: Mission – Flight Simulators



HERA XIV: Mission – Psychological Surveys



HERA XIV: Mission – Asteroid Rendezvous



Meanwhile, back on Earth...

HERA XIV: Hurricane Harvey



<https://www.ksat.com/news/watch-new-nasa-video-of-hurricane-harvey-shows-staggering-size>

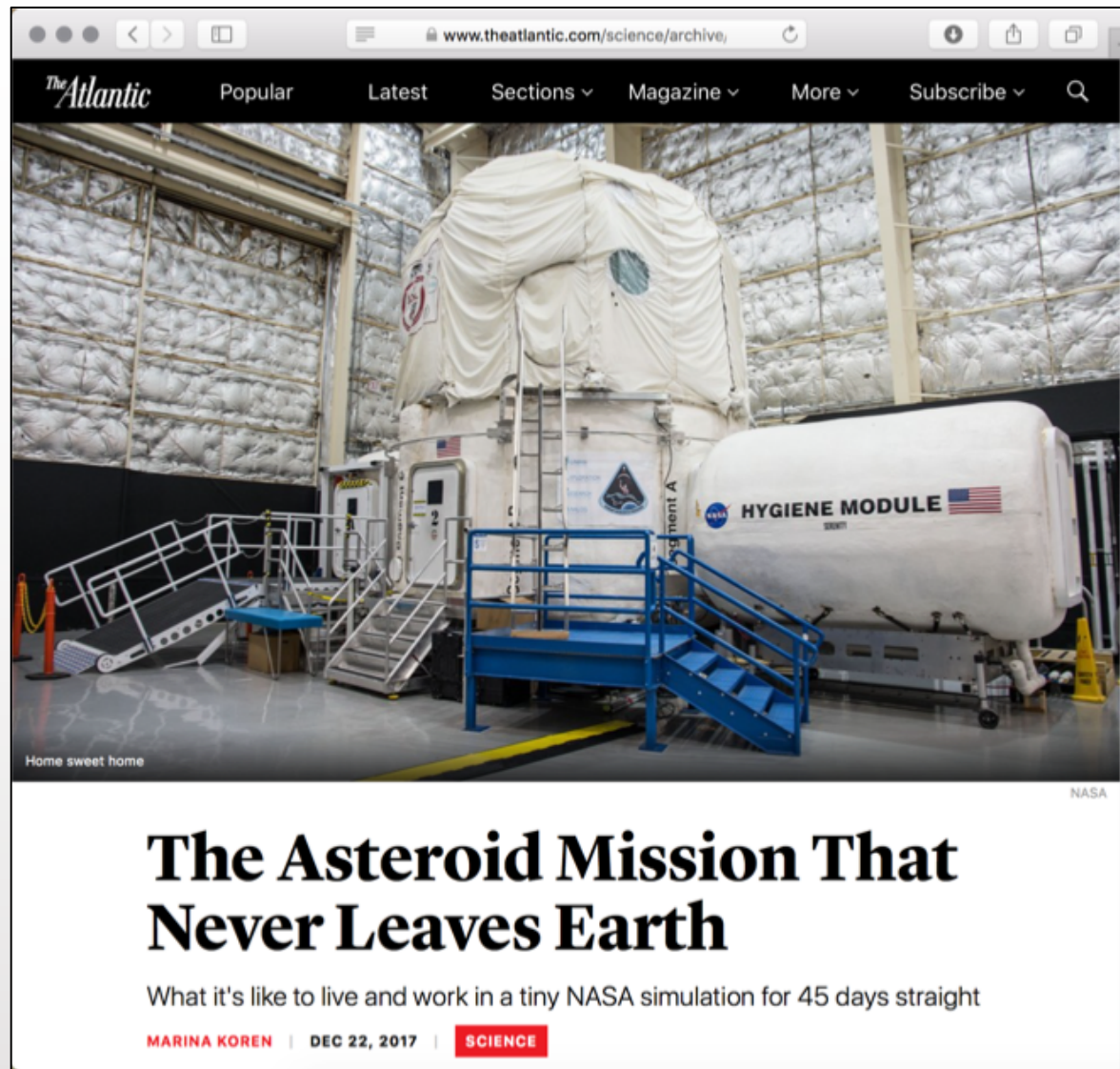


<http://www.businessinsider.com/hurricane-harvey-why-houston-flooded-2017-8>

HERA XIV: Emergency Evacuation



HERA XIV: Debriefs & Interviews



<https://www.theatlantic.com/science/archive/2017/12/wow-its-cramped-in-here/549032/>

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Questions?

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