AIAA Houston Section
Since 1962
American Institute of Aeronautics and Astronautics
HOUSTON SECTION • P.O. Box 57524 • Webster, Texas 77598
Web site: www.aiaahouston.org

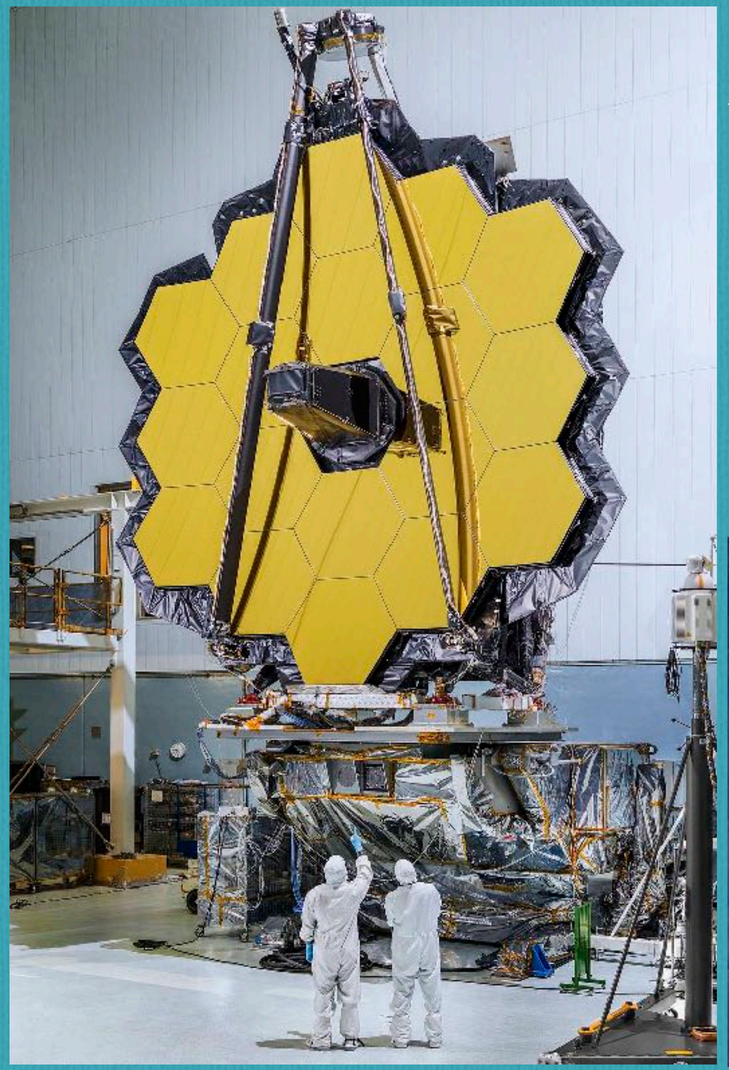
Aerospace News

November 26, 2016
www.aiaahouston.org/iac/#news

Sister Sections since 2007

l'Association Aéronautique et Astronautique de France (3AF)
3AF MP (www.3af-mp.fr) *Philippe Mairet*
AIAA Houston Section (www.aiaahouston.org) *Douglas Yazell*

AIAA Houston Section International Activities Committee (IAC) mirrors the AIAA IAC.



James Webb Space Telescope Mirrors Will Piece Together Cosmic Puzzles

[NASA, November 2, 2016] The primary mirror of NASA's James Webb Space Telescope consisting of 18 hexagonal mirrors looks like a giant puzzle piece standing in the massive clean room of NASA's Goddard Space Flight Center in Greenbelt, Maryland. Appropriately, combined with the rest of the observatory, the mirrors will help piece together puzzles scientists have been trying to solve throughout the cosmos.

Webb's primary mirror will collect light for the observatory in the scientific quest to better understand our solar system and beyond. Using these mirrors and Webb's infrared vision scientists will peer back over 13.5 billion years to see the first stars and galaxies forming out of the darkness of the early universe. Unprecedented infrared sensitivity will help astronomers to compare the faintest, earliest galaxies to today's grand spirals and ellipticals, helping us to understand how galaxies assemble over billions of years. Webb will see behind cosmic dust clouds to see where stars and planetary systems are being born. It will also help reveal information about atmospheres of planets outside our solar system, and perhaps even find signs of the building blocks of life elsewhere in the universe.

The Webb telescope was mounted upright after a "center of curvature" test conducted at Goddard. This initial center of curvature test ensures the integrity and accuracy, and test will be repeated later to verify those same properties after the structure undergoes launch environment testing. In the photo, two technicians stand before the giant primary mirror.

The Webb telescope is an international collaboration between NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA). For information on the Webb's Center of Curvature test, visit:
http://www.nasa.gov/feature/goddard/2016/nasa-completes-webb-telescope-center-of-curvature-pre-test

Image Credit: NASA/Chris Gunn
Caption: Rob Gutro

Launch date: October 2018
Rocket: Ariane ECA
Orbit: Sun-Earth L2 halo