

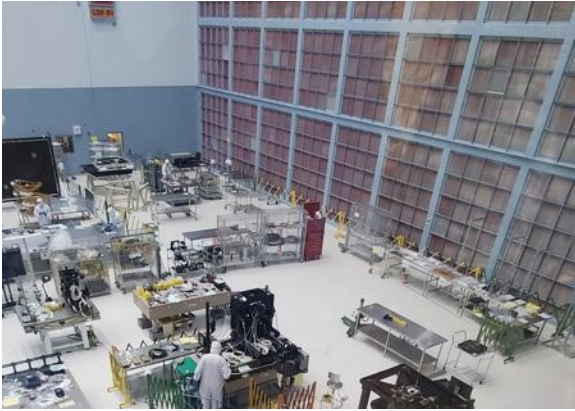
Trip to NASA Goddard Space Flight Center

September 15, 2022



The visitors with our Guide

Seventeen members and our guest speaker headed out to Greenbelt. At the visitor Center we were shown a 15-minute video overview of the Goddard mission and accomplishments. Our personalized welcome message was above the screen. We learned that the facility is huge, with 10,000 employees spread across 35 buildings. NASA operates several distinct divisions that overlap to some degree. We spent about 15 more minutes touring the Visitor Center before meeting our tour guide, DJ Emanuel, and boarding our private bus for transportation on to the Space Center campus.



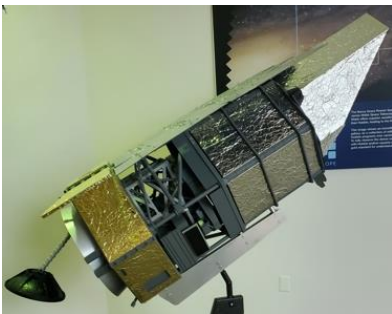
The Clean Room

We visited two buildings. The first houses the world's largest clean room where satellites are assembled. A wall of the room is made up of entirely HEPA filters because of the ultra-cleanliness requisites. We saw some parts and some mock-ups for



The Assemblers

the next big project, the Nancy Grace Roman Space Telescope. It will be nice to look back on that as it becomes a big news item in the years to come.



Model: Nancy Grace Space Telescope

We were then transported to the testing building where the components and assembled satellite are put through tests which simulate take off and conditions in deep space. These included long exposure to either high heat, extreme cold, or intense vibrations, etc. Our

group was asked not to take pictures in this building for security purposes. After the tour, we returned to the Visitor Center to explore the rocket garden and rockets in the back as well as other exhibits inside including fantastic pictures taken by the Hubble Telescope.



The Gardens



Horsehead Nebula

Our group then drove to Ruby Tuesdays in Greenbelt for lunch. We sat in a private room and competed to see who could bump their cholesterol the highest. After the meal, Eric Steckler, MD, from Florida gave a talk on “The History of Jews and Beer”. In biblical times, the women used byproducts of bread making to brew barley beer. Since beer was safer to drink than water, everyone was plotzed most of the time. It was a fitting end to a wonderful day.



Lunch