

FLORIDA REGION  
ANTIQUÉ AUTOMOBILE CLUB OF AMERICA

# *The Running Board*

Published Monthly in the Interest of the Preservation of  
Antique Motor Vehicles



**1955 Cadillac Eldorado convertible**

**October 2022**

Coming Events:

Oct 4-7	2022 Eastern Fall Nationals Hershey, PA	
Oct 10	Florida Region board Meeting, La Costa Brava 710 E Michigan St Building #742, Orlando, FL 32806	6:00PM
Oct 10	Florida Region General Meeting, La Costa Brava 710 E Michigan St Building #742, Orlando, FL 32806	7:00PM



For the latest Florida Region club news visit our website

[www.FloridaRegion.aaca.com](http://www.FloridaRegion.aaca.com)



THE RUNNING BOARD	
October 2022 Volume 46 / Issue 10 Editor/Designer: Glenn Harris	
Contributors: Josh Cole Glenn Harris Carole Allen Don Allen Club website <a href="http://floridaregion.aaca.com/">http://floridaregion.aaca.com/</a>	

Webmaster Larry Mills	954-871-7837
Facebook Josh Cole	321-279-1000 <a href="https://www.facebook.com/Antique-Automobile-Club-of-America-Florida-Region-100870549056390/">https://www.facebook.com/Antique-Automobile-Club-of-America-Florida-Region-100870549056390/</a>

PRESIDENT	Charlie Jones	407-968-0835
VICE PRESIDENT	Mickey Bryant	407-889-780
SECRETARY		
Joshua Cole	321-279-1000	
TREASURER		
Don Allen	863-604-3148	
BOARD OF TRUSTEES		
Darrel Cole	407-963-9089	
Larry Cole	352-735-1655	
Larry Mills	954-871-7837	
Bill Morris	407-493-2809	
Jack Scott	407-830-4954	
Bob Coolidge	386-956-3465	
MEMBERSHIP CHAIRPERSONS		
Don and Carole Allen	863-604-3148	
CLUB HISTORIAN	Don Allen	
HOSPITALITY	Betsy Campbell	407-460-7002

Send your article submissions to:  
boardeditorfl@gmail.com  
Deadline is the 20th of the month

**Board and General Meeting –**

The September 12th board and general meeting was held at the club’s new meeting location at La Costa Brava 710 E Michigan St Building #742, Orlando, FL 32806. The general meeting was called to order at 7:17P by President Charles Jones, and the Pledge of Allegiance was conducted. Joshua Cole read the secretary's report from the August meeting. Don Allen presented the treasurer’s report which was accepted by the club members. There were 11 club members present for the meeting.

A discussion was opened by the club president about the club budget for next year (2023). The treasurer review of the budget has determined that the club will have a shortfall in the budget to meet the projected expenses for 2023. The current member count will not support the 2023 expenses.

The club president and board proposed a set of actions to eliminate the 2023 budget shortfall.

- 1) One pot luck dinner instead of two for 2023 that would be held at a restaurant.
- 2) Not print out the membership directory but sending out a listing of changes for the next year or two
- 3) Increase membership such as using events like Cars and Coffee.

We do not plan to go back to the new meeting place in South Orlando. The club president and board discussed the impact of the current meeting on attendance. The current location discourages attendance for many members due to the increased distance to travel and traffic. A location in Winter Park would be more accessible for the club members.

The meeting place for the next meeting will be announced by E-Mail within a week or so.

The president announced that the Lakeside Inn will not be able to host the club car show so a new place needs to be selected. The Mount Dora Baptist Church was offered as an option for the show.

At the end of the discussions, the Fifty-Fifty drawing was held.

### **Treasurer's Message**

Hi Florida Region Members,

We do not plan to go back to the new meeting place in South Orlando. The meeting place for the next meeting will be announced by EMAIL within a week or so.

As you know, we changed our meeting place because we could not afford the \$100 per month room use fee. As it has turned out, many people don't want to drive to South Orlando for the meeting and our attendance has been very poor. We are asking for your help to find a place, preferably in Winter Park. We can afford the \$25 that we are now paying. If you can find a place, please call Charlie Jones at 407-969-0835.

Don Allen, Club Treasurer

### **October Birthdays**

Annie Juergensen	October 9
Kendra Gilkes	October 10
Dick Gauchat	October 12

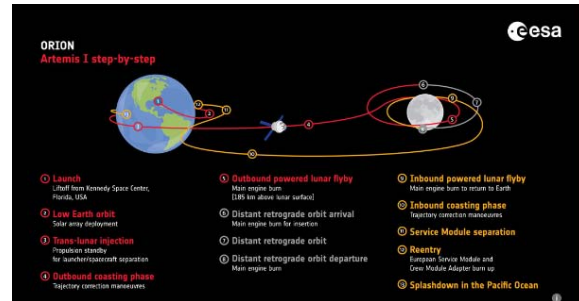
## Artemis Space Launch System Moon Mission

Since the SLS Artemis rocket may soon launch from Kennedy Space Center, I thought that it would be a good chance to explain what I have been doing to support the Boeing work on the SLS Core Stage and Exploratory Upper Stage.

My job is a secondary engineering support position to ensure the thermal analysis requirements are properly satisfied for the SLS Core Stage design performance. It is considered too boring for most engineers but it gives me a little excitement. This is a moon mission rocket and that is a big deal for me. Besides this vehicle could be a 20 to 30 year program. That is why I jumped at the job offer. I was offered the job since I had worked on the Space Shuttle External Tank and Solid Rocket Programs.

The job consists of reviewing the design control documentation and verifying that the analysis reports, qualification and acceptance testing meet the thermal requirement. It is a good position for getting to know the SLS components and system details.

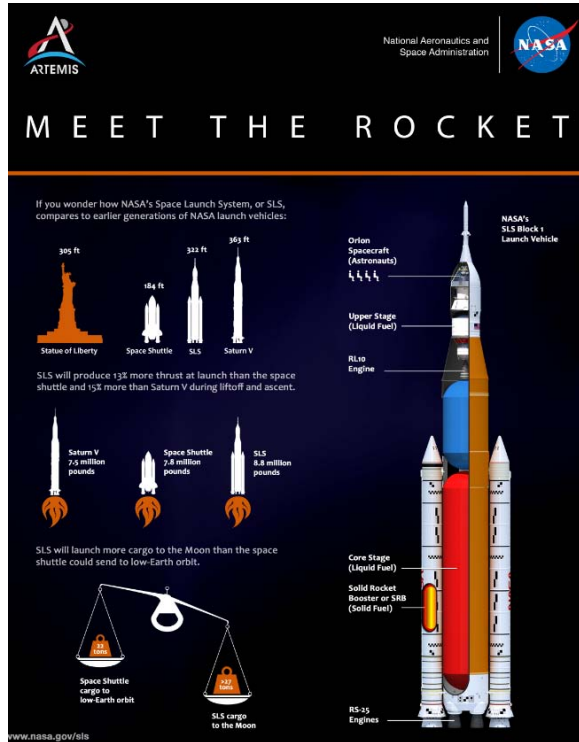
Here are some details about the SLS program I am working on.



The Artemis I mission is an uncrewed voyage to the Moon, looping around our moon in an elongated orbit and then returning to Earth. NASA's Space Launch System (SLS) core stage is the world's tallest rocket stage. Towering 212 feet with a diameter of 27.6 feet, it stores cryogenic liquid hydrogen and liquid oxygen and all the systems that will feed the stage's four RS-25 engines.

SLS is an advanced, super heavy-lift launch vehicle that will provide an entirely new capability for science and human exploration beyond Earth's orbit. With unmatched payload mass and volume capability, SLS is the only rocket that can send the Orion spacecraft, astronauts, and supplies to the Moon on a single mission. This reduces the number and complexity of in-space operations and increases the opportunities for mission

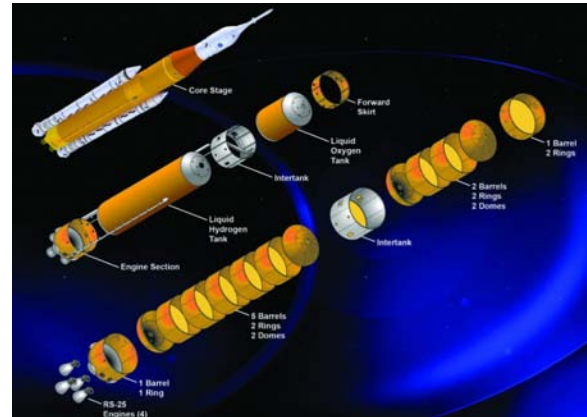
success.



<https://www.nasa.gov/exploration/systems/sls/factsheets.html>

It also houses the flight computers and much of the avionics needed to control the rocket's flight. The core stage is designed to operate for approximately 500 seconds before reaching low-Earth orbit and separating from the upper stage and

Orion spacecraft.



The core stage serves as the backbone of the rocket, supporting the weight of the payload, upper stage, and crew vehicle, as well as structurally supporting and carrying the thrust of its four RS-25 engines and two five-segment solid rocket boosters attached to the engine and intertank sections.

The core stage is the same diameter as the space shuttle external tank and is covered with an orange spray-on foam to insulate the cryogenic propellants. The stage is made up of 10 major barrel sections, four dome sections, and seven rings. Each cylindrical barrel section consists of eight aluminum panels that vary in length and height. Those components are welded to form five major components: the liquid hydrogen and liquid oxygen tanks, engine section, intertank, and forward skirt. Those five major components are joined to form the completed core stage.

Boeing, the prime contractor for the SLS core stage, uses state-of-the-art



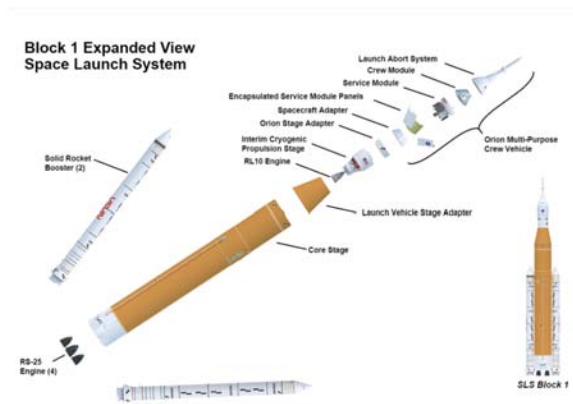
manufacturing equipment to build the stage at NASA's Michoud Assembly Facility in New Orleans. Michoud is a unique advanced manufacturing facility where NASA has built spacecraft components for decades, including the space shuttle's external tanks and Saturn launch vehicle stages. The Core Stage 1 for Artemis I was completed and sent to the Stennis Test Center in Mississippi for the Green Run test firing which was completed in 2021. It was delivered to the KSC and the Wet Dress testing was completed to verify that the LH2 fuel and LO2 oxidizer can be loaded.

**Core Stage LH2 fuel and LO2 oxidizer tanks at Michoud assembly**



**Partial view inside the Core Stage Engine Section**

Structurally similar versions of the core stage's intertank, engine section, and liquid oxygen and liquid hydrogen tanks were built and tested to ensure the stage can



withstand the SLS flight environment.



**Core Stage being lifted into Stennis Space Center test stand for Green Run Test Firing**



Artemis I core stage green run test in the B-2 test stand at NASA's Stennis Space Center.  
*Credits: NASA*

NASA and Boeing are building the core

stages for the Artemis II and III missions. Every SLS configuration uses the core stage with four RS-25 engines. The first SLS vehicle, called Block 1, can send more than 27 metric tons (t) or 59,525 pounds (lbs.) to orbits beyond the Moon. As the SLS rocket evolves, it will send even heavier and larger payloads to the Moon and deep space.

The SLS Artemis was checked out for launch with a Wet Dress tanking to demonstrate readiness for launch in August. After encountering a hydrogen leak early in the loading process, engineers were able to troubleshoot the issue and proceed with the planned activities.



The four main objectives for the demonstration included assessing the repair to address the hydrogen leak identified on the previous launch attempt,

loading propellants into the rocket's tanks using new procedures, conducting the kick-start bleed, and performing a pre-pressurization test. The new cryogenic loading procedures and ground automation were designed to transition temperature and pressures slowly during tanking to reduce the likelihood of leaks that could be caused by rapid changes in temperature or pressure. After encountering the leak early in the operation, teams further reduced loading pressures to troubleshoot the issue and proceed with the demonstration test. The pre-pressurization test enabled engineers to calibrate the settings used for conditioning the engines during the terminal count and validate timelines before launch day to reduce schedule risk during the countdown on launch day.

So the Artemis is at Kennedy Space Center in the VAB and will be ready to be launched when rolled back to the launch pad when the hurricane clears.



Concept of the Artemis Space Launch System blast-off / Credit: NASA / MSFC

