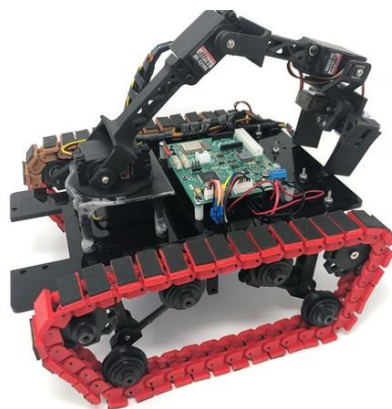


2019 A Rover Odyssey Mission Plan



INTRODUCTION

This competition is a celebration of the 50th anniversary of the first landing of a human on the moon. To learn about and honor the team members that accomplished this great undertaking, your competition will follow the trail blazed by many hard working engineers, technicians, managers, support personnel and astronauts.

This commemoration will take place within the NASA Florida Space Grant capabilities and constraints of time, money, travel, and location.

OPERATION

The purpose of this competition is to have your team operate a 3D printed Rover on a Lunar Simulated Surface, located at the Kennedy Space Center Visitor Complex, and perform certain required tasks in the fewest moves. There are several critical milestones that you must accomplish to complete your mission and earn the maximum points. These milestones include:

Your Team's actions and milestones as you participate in the Lunar Rover Competition				Compared to the Apollo Program and Missions	
YOUR TEAM'S MILESTONE AND PROGRAM PHASES	ACTION PERFORMED BY	RESULTS RECEIVED BY	YOUR TEAM'S MILESTONE DATE	PROGRAM PHASE for a MISSION TO THE MOON	APOLLO MISSION
Form your team	Library Staff	Team members	May 24, 2019	Identify the mission requirements	President Kennedy May 25, 1961
Select Team and Rover name	Team members	Team members	May 31, 2019	Identify experiments going on the spacecraft and the Principal Investigators	NASA
Provide Supplies needed for the competition including the robot rovers	Atlantis	Wakulla Team members Hardee Team members	Wakulla June 7, 2019 Hardee June 10, 2019	Build Flight Hardware	Contractors and sub-contractors build and test hardware and software
Workshop on how to control and program the robots, in preparation for the final competition	Atlantis	Wakulla Team members Hardee Team members	June 7, 2019 June 10, 2019	Mission Team Training	Training the flight crew, launch team (KSC), and mission control team (JSC)
Apollo Mission History	Florida Space Grant Consortium	Team Members, Library Staff, and General Public	June 19, 2019 Or June 21, 2019	Inform the United States Public about the Apollo Program and each Apollo Mission based on launch schedule	NASA Public Affairs Press conferences and Press Releases

Practice operating the rover and learn to control and operate by way of the internet	Team	Wakulla Team members Hardee Team members	June 7 – July 10, 2019 June 10 – July 8, 2019	Mission Team Training	Training the flight crew, launch team (KSC), and mission control team (JSC)
Make sure your team is ready to operate your rover remotely and therefore ready to ship the rover	Your Team	Library Staff	July 8, 2019	Mission Readiness Review	Verify Flight Crew and ground teams ready for launch the Saturn V
Package the rover for shipment to Kennedy Space Center (KSC)	Team and Library Staff	Rover	July 8 – 9, 2019	Place rover on the launch vehicle	Flight Equipment Stowage on the Saturn V
Take package to the shipper (USPS or FedEx or UPS)	Team and Library Staff	Shipper	July 10, 2019	Apollo 11 Launch	July 16, 1969 9:32 am GMT-4
Package is transported to Kennedy Space Center	USPS or FedEx	Rover	July 10 – 15, 2019	Trans Lunar Orbit. The spacecraft is on it” way to the Moon	On their way to the moon. July 16, 1969
Package received and unpacked by Atlantis	Atlantis	Rover	July 16, 2019 (50 Years after the launch of Apollo 11)	Lunar Module separates from the Command and Service module	Begin landing phase. July 20, 1969
Rover placed on Moon Simulated Surface at Kennedy Space Center	Atlantis	Rover	July 17, 2019	Lunar Module Lands on the Surface of the Moon	Prepare for activity on the lunar surface. July 20, 1969 at 4:18 pm EDT
Competition operating the rover on the Moon Simulated Surface	Team	Competition	July 17, 2019	First step of a human on a celestial body	July 20, 1969 at 10:56 pm EDT