REV	Description	Eng	Date	Appr	Date
A					

REVISION HISTORY

MARSSPACECONSTRUCTION. LLC
Montgomery, TX 77356

All we have to do is SCIENCE the HELL out if this

Texas Registered Engineering Firm F-~~XXX~~

Work by Mars Space Construction, LLC

Doc. I.D.	DES-Starship-014	Page 1 of 1	REV. A
Job No.	XXXXXXXX	By:	Date
		GJR	6/11/2021

REV.	X	Request for Quotation
DATE	X	
BY	X	
APPR.	X	
NO.	X	
FIRM	X	

Title: Starship Module - MSC Science Lab

Design Variables need to be defined:

Equipment List:
1. Water 2. Oxygen 3. Carbon Dioxide 4. Propellant 5. Solar

Mars Advanced Science Laboratory. It is possible to envisage more elaborate versions of NASA's planned Mars Science Laboratory equipped with, for example, more capable analytic instruments and the ability to drill beneath Mars's thin, hostile near-surface layer. These capabilities, plus extended range and endurance, are signifi- cantly enhanced by the availability of power at a level of hundreds of watts or greater from RPSs. A somewhat similar concept, the Astrobiology Field Laboratory, has been studied for possible launch to Mars sometime in the next decade.2

NASA - MARS 2020 MISSION - PERSEVERANCE Rover (example: Equipment Package)

MastCam-Z	The MastCam-Z is the name of the mast-mounted camera system that is equipped with a zoom function on the Perseverance rover. MastCam-Z has cameras that can zoom in, focus, and take 3D pictures and video at high speed to allow detailed examination of distant objects.
MEDIA	The Mars Environmental Dynamics Analyzer is known as MEDA. It makes weather measurements including wind speed and direction, temperature, and humidity, and measures the amount and size of dust particles in the Martian atmosphere.
MOXIE - (Oxygen Generation Module)	The Mars Oxygen In-Situ Resource Utilization Experiment is better known as MOXIE. NASA is preparing for human exploration of Mars, and MOXIE will demonstrate a way that future explorers might produce oxygen from the Martian atmosphere for propellant and for breathing.
PIXL	The Planetary Instrument for X-ray Lithochemistry is called PIXL. PIXL has a tool called an X-ray spectrometer. It identifies chemical elements at a tiny scale. PIXL also has a camera that takes super close-up pictures of rock and soil textures. It can see features as small as a grain of salt! Together, this information helps scientists look for signs of past microbial life on Mars.
RIMFAX	The Radar Imager for Mars' Subsurface Experiment, known as RIMFAX, uses radar waves to probe the ground under the rover.
SHERLOC	The Scanning Habitable Environments with Raman & Luminescence for Organics & Chemicals has a nickname: SHERLOC. Mounted on the rover's robotic arm, SHERLOC uses spectrometers, a laser, and a camera to search for organics and minerals that have been altered by watery environments and may be signs of past microbial life.
SuperCam	The SuperCam on the Perseverance rover examines rocks and soils with a camera, laser and spectrometers to seek organic compounds that could be related to past life on Mars. It can identify the chemical and mineral makeup of targets as small as a pencil point from a distance of more than 20 feet (7 meters).

NOTES:
1) XX