IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Inderjeet Rishiraj's Spacecraft

Inderjeet Rishiraj, B.Sc., (1967), K.M. College, Delhi University - India.

Abstract:

Accurate and reliable navigation systems are crucial for precise course correction and rendezvous maneuvers during long missions. Spacecraft experience deviations from their intended flight paths due to a combination of external forces, even if they are initially launched on a precise trajectory. These forces, though small, accumulate over time, causing deviations from the planned path. Even small pressure of sunlight on the spacecraft adds up over time and is sufficient to push the spacecraft off course.

Once the spacecraft leaves the launchpad, an orbit determination analyst processes various forms of tracking data to find its position at any given time.

Once the orbit determination team gets a good estimate for the current location of the spacecraft, the flight path control team evaluates how far the spacecraft has drifted from the reference trajectory. Other maneuvering management teams evaluate different thruster operation times to get the spacecraft back on course. The spacecraft team at the control center creates a set of commands to accomplish the correction. The commands are then uplinked to the spacecraft by the use of powerful Earth-equipped antennas and other equipment to communicate with the spacecraft. Antennas used for spacecraft communication need to be precisely pointed towards the spacecraft to ensure reliable data transmission and reception. Networks of antennas are indeed positioned around the Earth. These networks utilize multiple antenna complexes strategically located to ensure continuous communication with spacecraft across the globe.

This orbit determination and flight path control continues without pause throughout the lifetime of a flight mission. The spacecraft generally keeps wandering off and must be brought back on course immediately before it starts moving along a lost path.

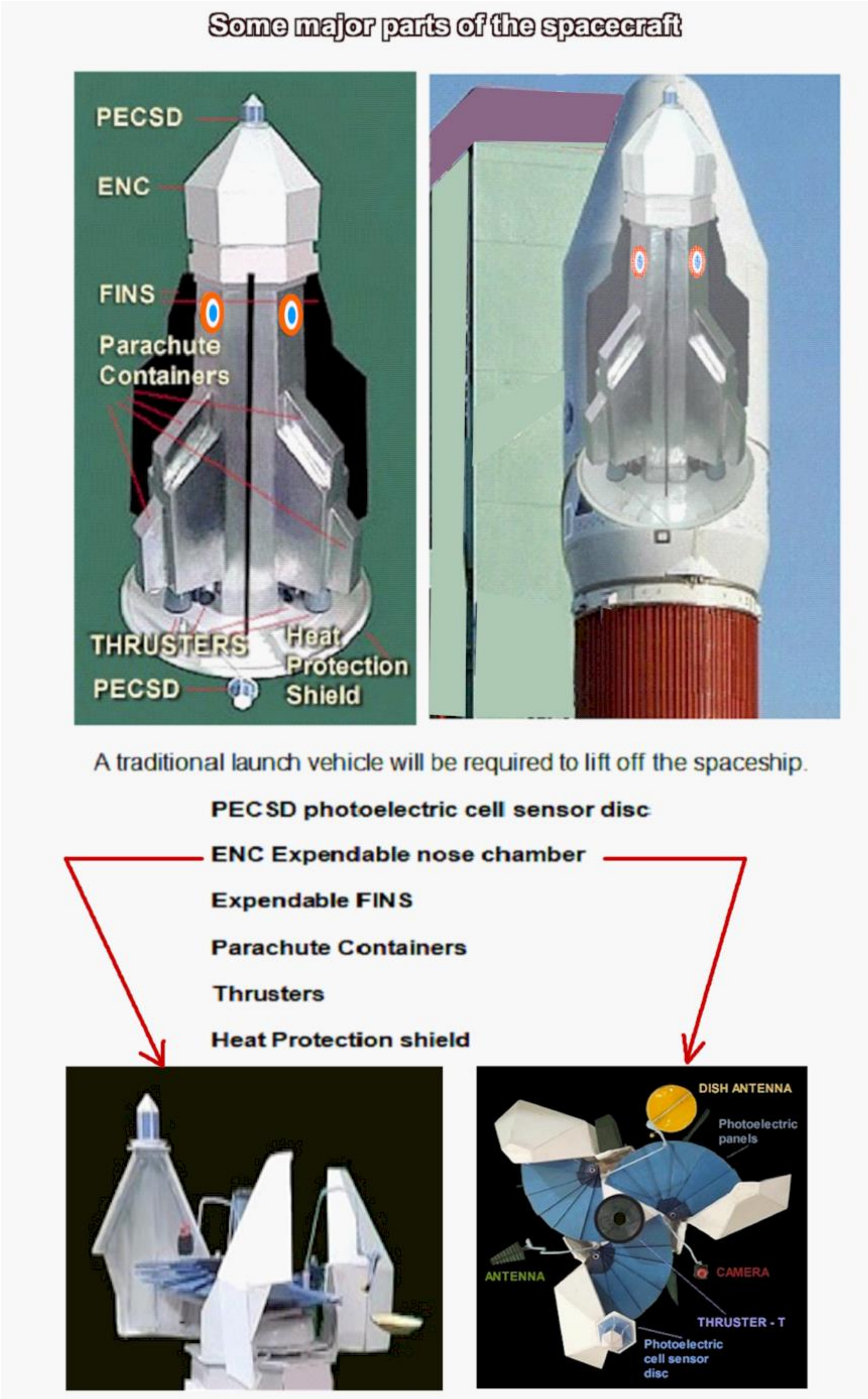
Now an easy manner of navigation to different planets will make the spacecraft more independent from Earth-based monitoring stations positioned at different locations of the Earth. The necessity of orbit determination and flight path control will not be as crucial, as the spacecraft will have its own inbuilt system to keep it moving on its perfect linear trajectory. Also, as its maneuvering will not depend on signals from the earth stations, it will be extremely tough for the hostile entities to disturb its planned trajectory by cyber assaults.

It will have a new function to make it tour parallel to the Sun's rays. That is, its main trajectory will be continually toward or away from the Sun. For precise touchdown on the Moon, Mars, or other planets, the time of uplift from the Earth will be based on its speed and the time of the planet that will approach its travel path. The same logic will be used to make it return to Earth. This system of navigation will make it adopt an auto-orbit correction system without depending on Earth-positioned monitoring stations that utilize complex technologies.

The probabilities of the spacecraft getting drifted from its trajectory will be minimal, as a simple photoelectric cell tracking system will keep it moving parallel to the Sun's rays. For any trajectory deviation, a quick automatic maneuver will hold the spacecraft on path.

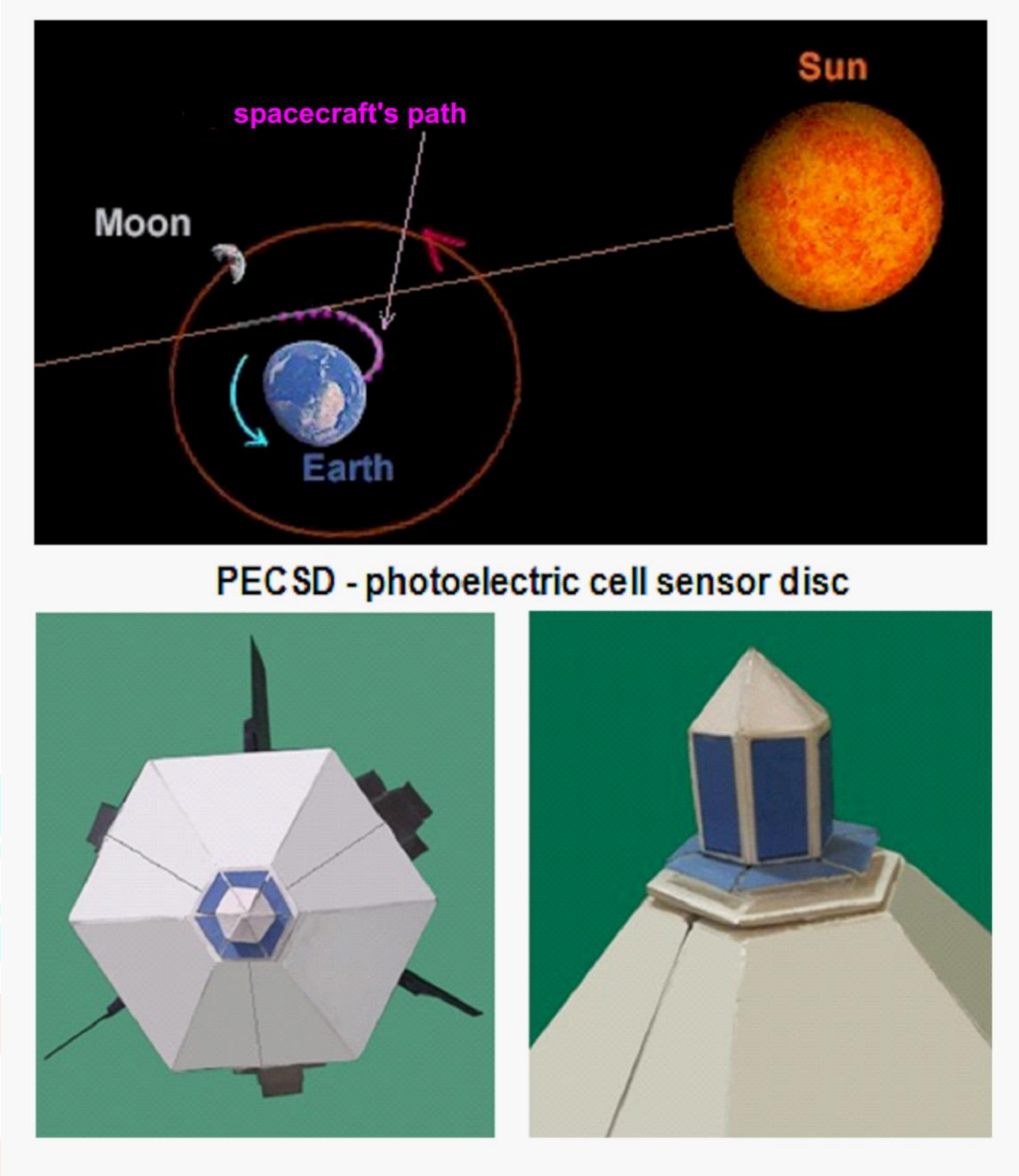
It will use satellite-based mobile phone technology for communication and tracking purposes. This will assist in lessening its operational costs and dependencies on high-priced earth-based stations. Already orbiting satellites that are supporting the operation of satellite mobile phones will be the main source of communication.

Description of the spaceship is shown here by self explaining images.



Time of liftoff

The spaceship will follow the path parallel to the Sun's rays. It will start moving away from the Earth immediately after attaining escape velocity. Time of liftoff will be selected in such a way that when it will be moving parallel to the Sun’s rays, the planet that it intends to land on will approach its travel path.

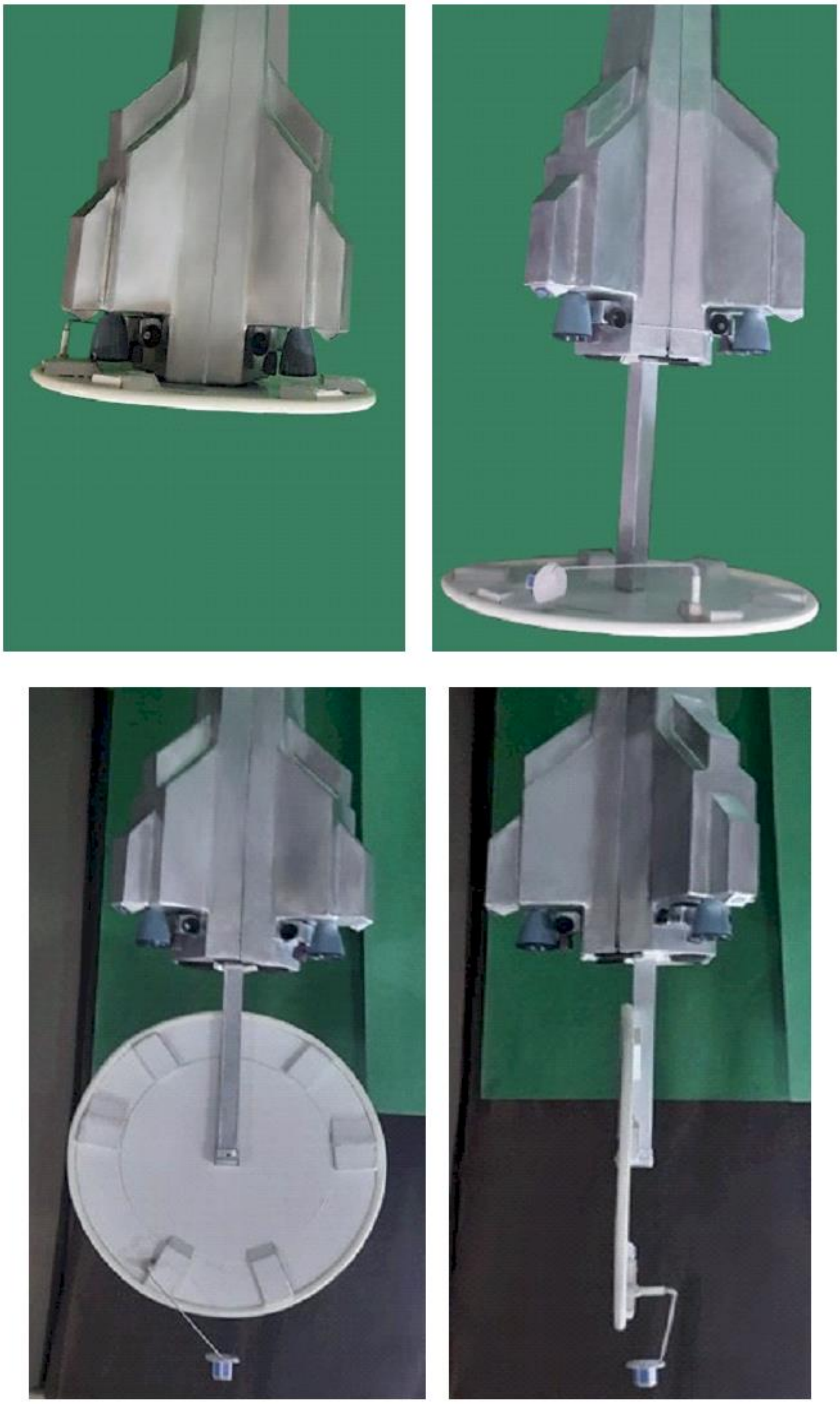


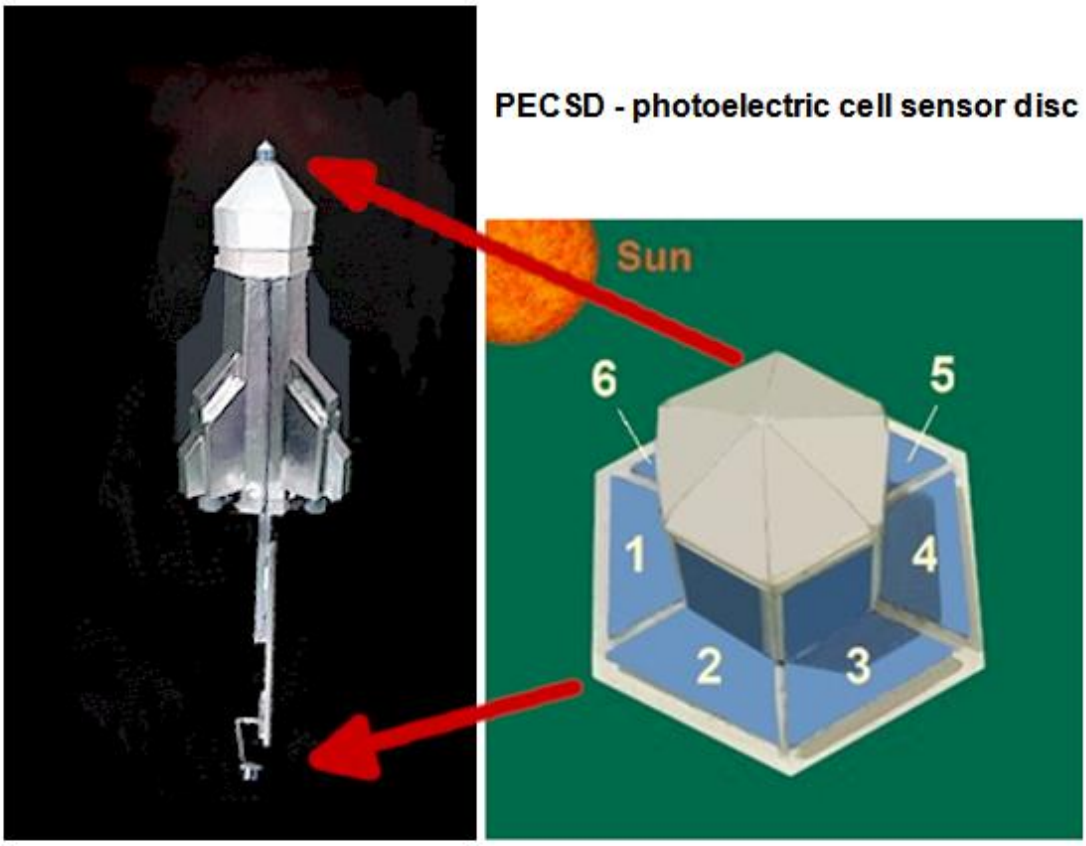
Uneven current from 12 photoelectric panels will manage small thrusters at its tail to keep it travelling to the Sun.

Large heat protection disc at its base

The image of the spacecraft is showing a large disc at its base. It will use this disc as a heat protection shield during landing on Earth.

Immediately after its liftoff it will reposition its heat protection disc to allow gases from the thrusters located near its base a free path to exist.

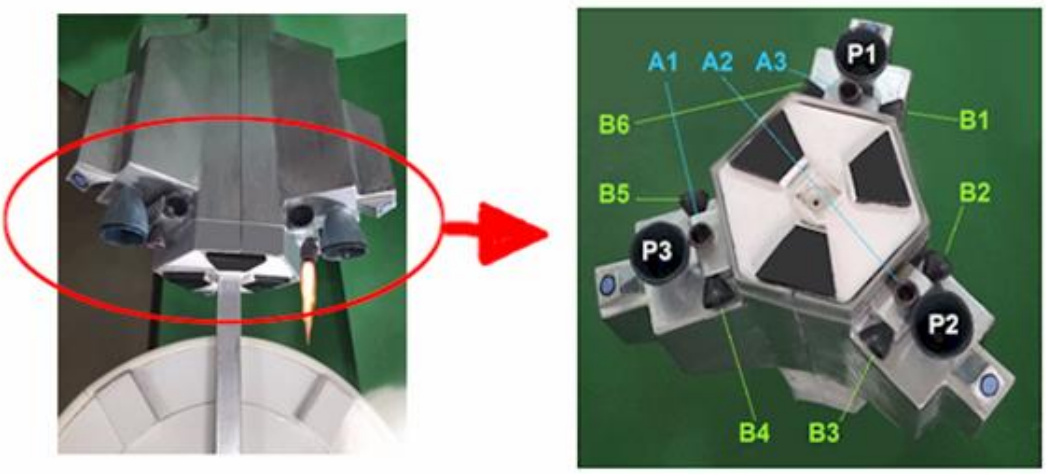




Two different photoelectric cell sensor discs are to be used to find the position of the Sun with respect to its axis. One PECSD is located at its top end, and the other is located at its tail end. Each PECSD is composed of 12 photoelectric cell plates. Different voltages of current will be produced by the cells depending on the intensities of the sun's rays striking them.

The current generated in these cells by the sun's rays will reach the computer section, which will keep examining the sun's position, and if it is found to start drifting away from its trajectory, the computer will evaluate the operation of the thrusters to produce the required pulses of force to align it back with its axis parallel to the sun's rays.

By generating computer-controlled small pulses by its mini thrusters A1, A2, and A3, it will keep aligning its vertical axis parallel to the sun's rays. After adjustment of its vertical axis, a strong push by its large thrusters P1, P2, and P3 will keep it going towards the Sun. There are six other thrusters (B1 … B6) that are to be used to spin it around its axis whenever required. It also has the largest thruster (T) under its nose tip (not visible in this figure).



For every spacecraft there are three main critical operational sections. The first is to achieve escape velocity. The second is to follow a strict path to approach the destination planet. And the third is a smooth landing. To make it travel in a desired direction, it needs to know its speed and direction of movement so that necessary corrections can be applied to redirect it following the predefined path.

Most of the procedures to find its relative location and direction of motion that are being used depend on its speed with respect to the Earth, the target object(s) (Moon, Mars, some asteroid, space station, etc.), or the Sun, or solar objects. These speeds are measured mostly by Doppler shifts in

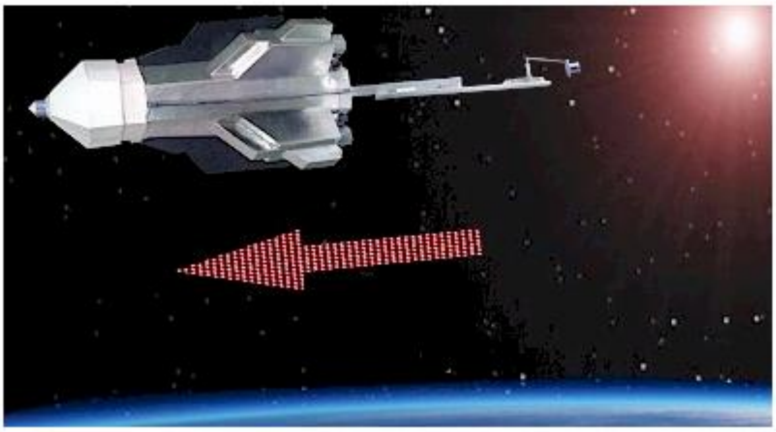
- radio waves emitted by radar the spaceship carries, reflected by the surface of some target
- the communication signal between spaceship and Earth.

The spaceship will not depend on most of such procedures.

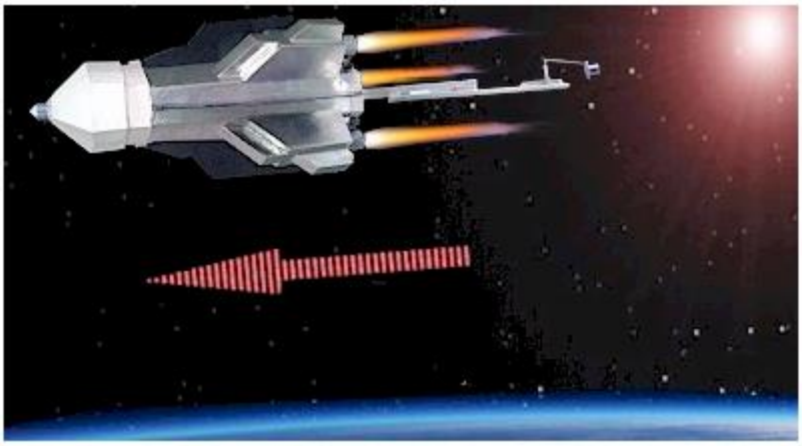
Its velocity will be calculated by its onboard computer system that will keep analyzing data of its change of momentum by the use of force sensors. The computer will keep maintaining its desired velocity by timely operation of specific thrusters. It will use thrusters P1, P2, and P3 and the thruster T to adjust its speed.

During travel to Moon

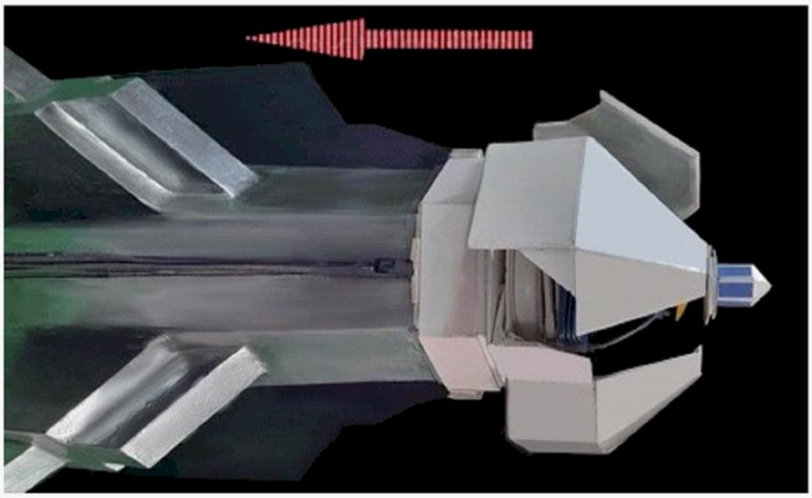
Once the spaceship exits from the earth and is moving away from the sun and earth, it will adjust its axis parallel to the sun's rays with the help of mini thrusters A1, A2, and A3.

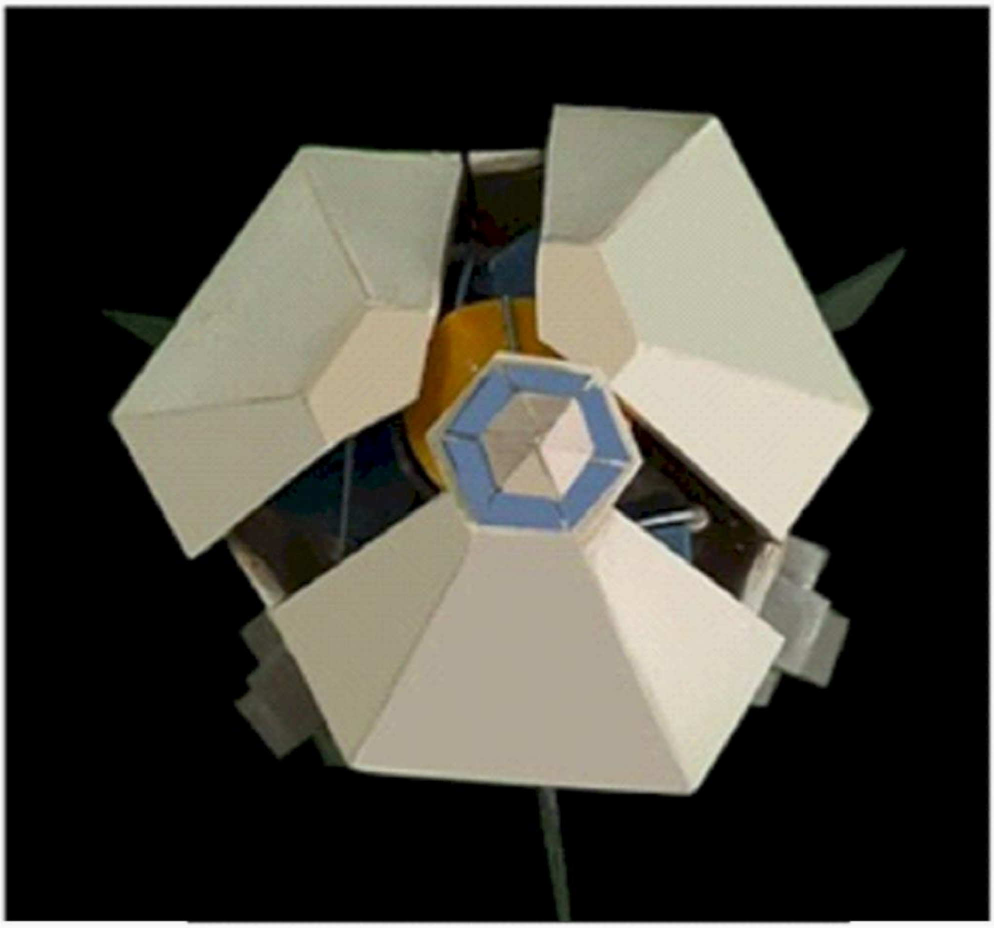


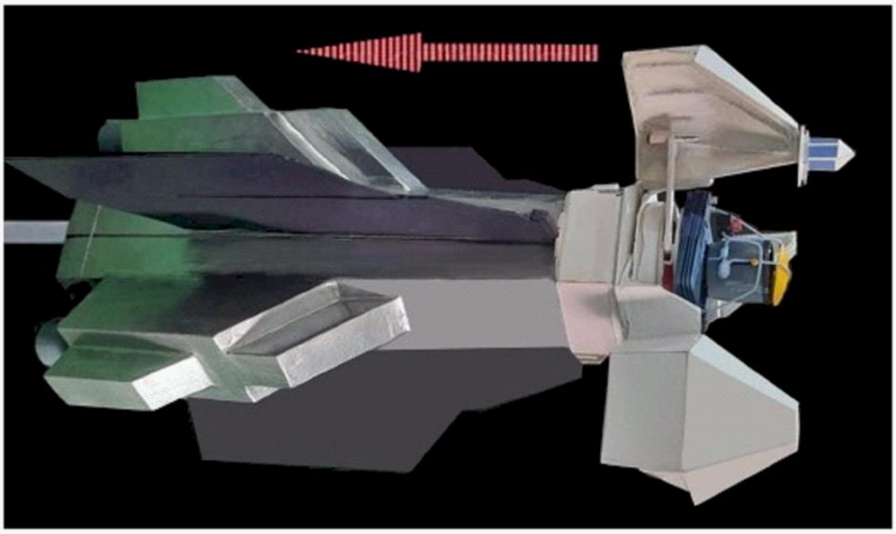
Once the spaceship has aligned its axis parallel to the Sun's rays, it will be directed to keep travelling away from the Sun and Earth by generating strong uniform forces by its three thrusters, P1, P2, and P3. This act of firing gases from thrusters P1, P2, and P3 will be for a very short period till it crosses the escape velocity of Earth (the escape velocity of Earth is 11.19 km/s). Immediately after liftoff from Earth with the support of the launch vehicle, the propellers of the launch vehicle will continue to increase its speed to 11.10 km/s.

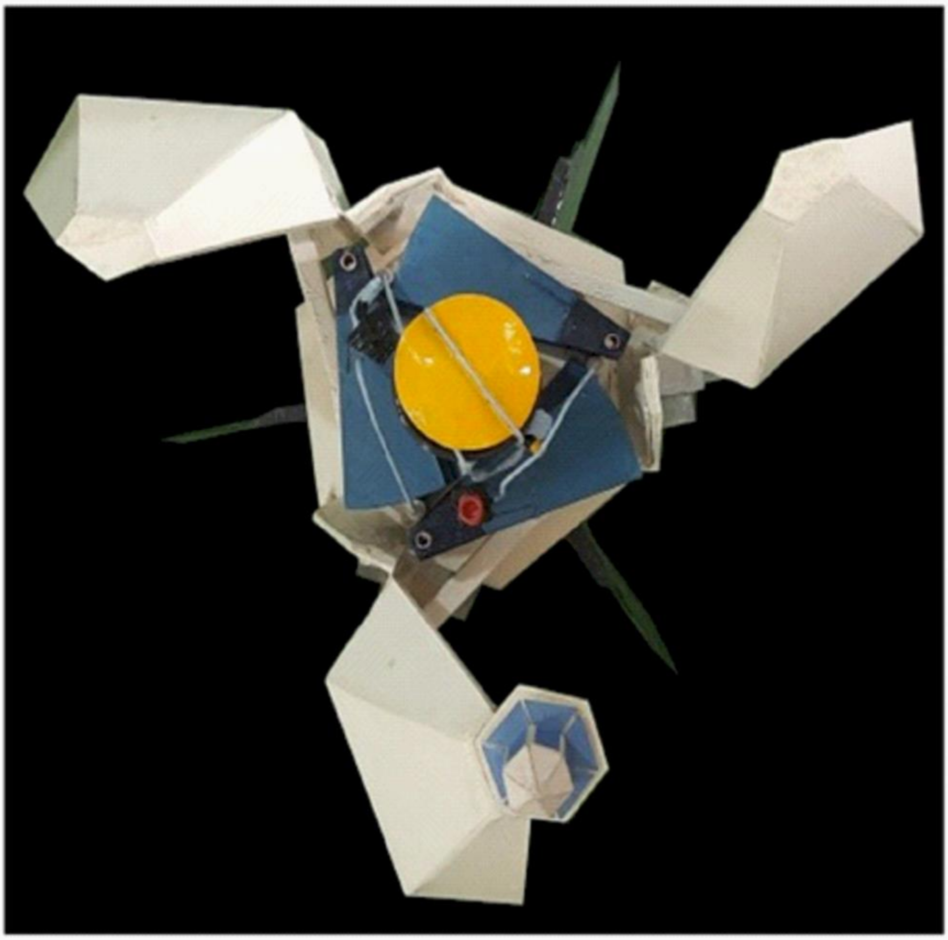


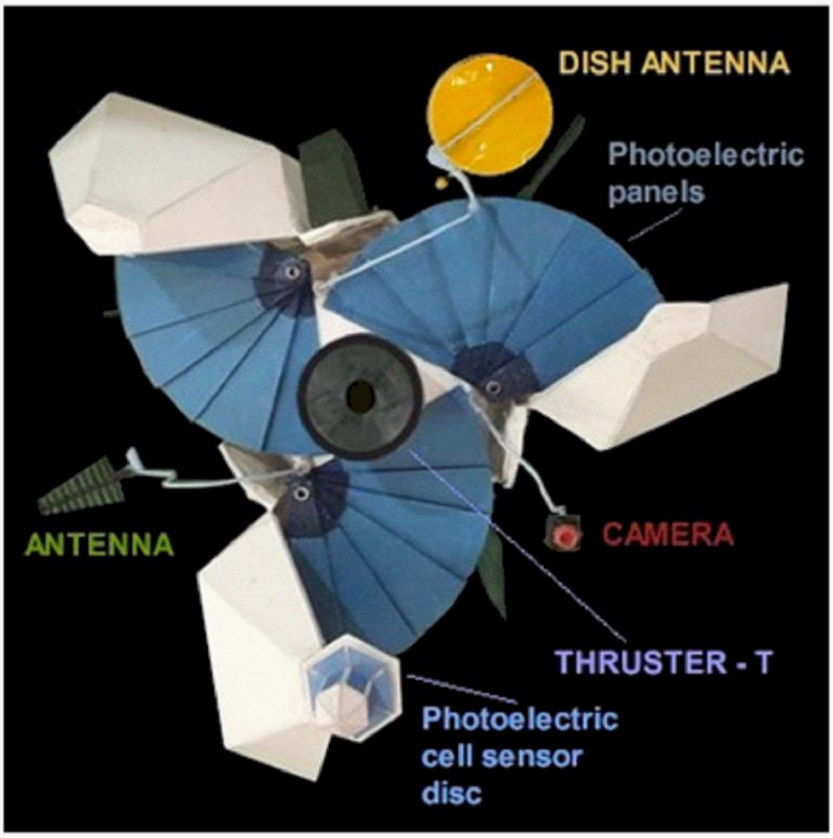
After a certain time it will reposition via rotating its axis by 180 degrees so that the upper top starts facing the Sun and will open the nose chamber.

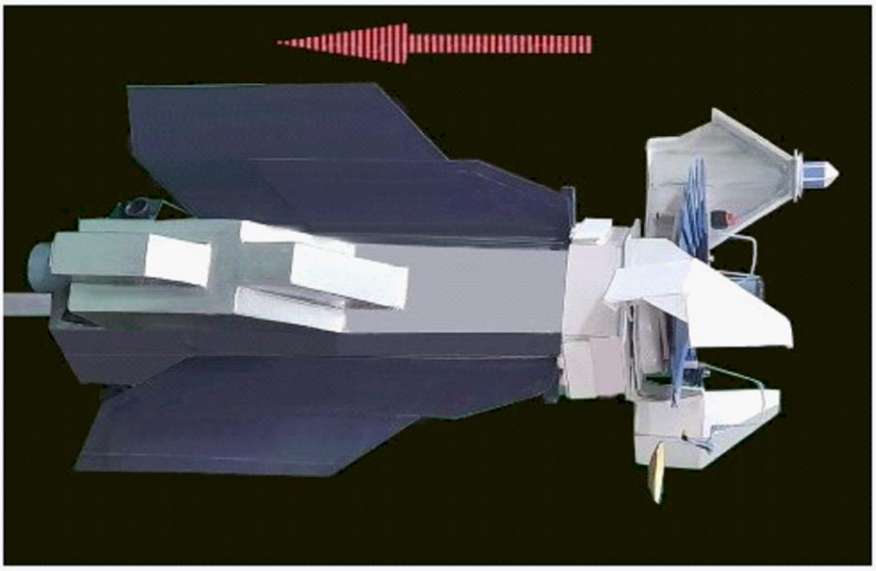








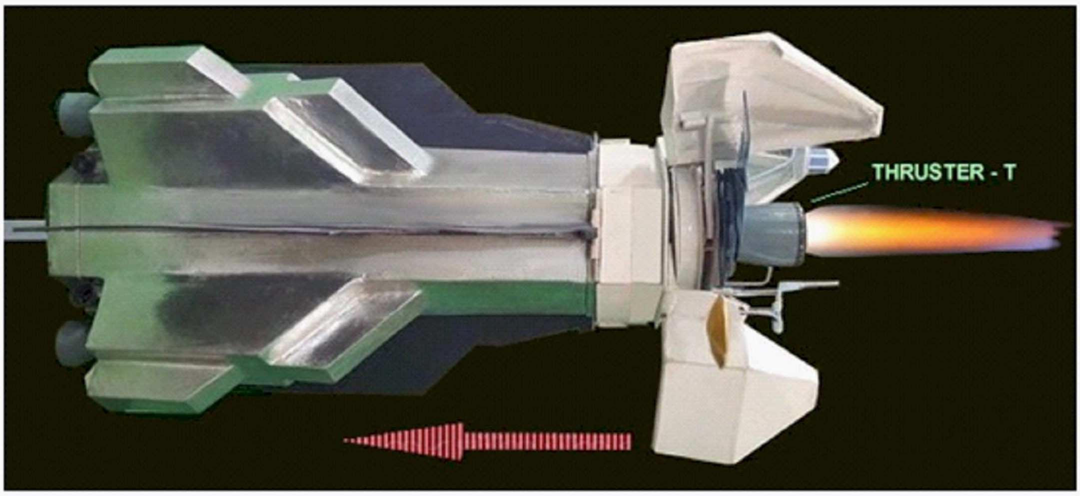


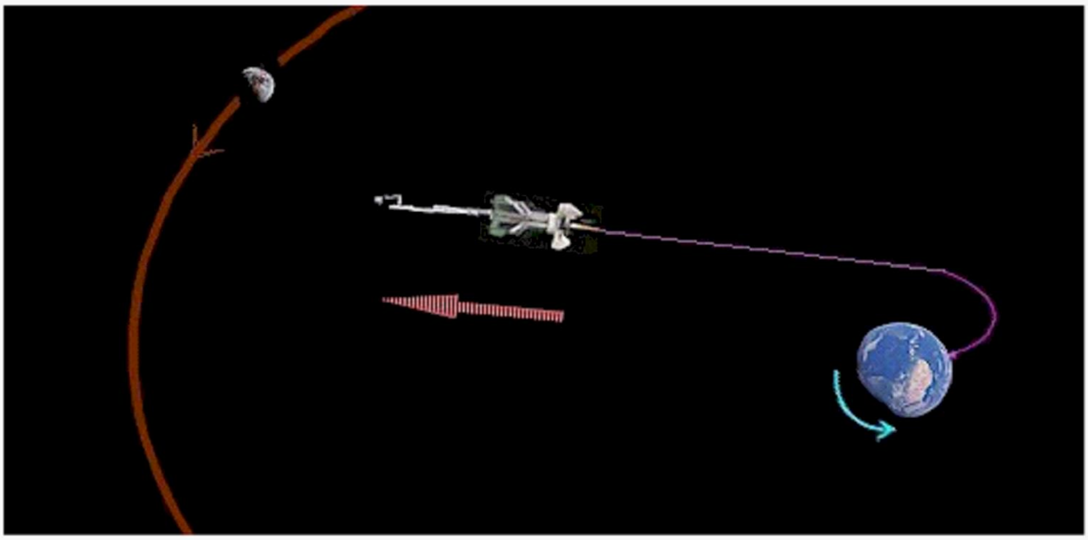


Now, with the help of photoelectric cell sensor discs located at its top and facing the Sun, it will continue adjusting its axis parallel to the Sun's rays with the help of mini thrusters A1, A2, and A3. The thruster at its top (T) will generate strong forces to keep it travelling on the desired path. This act of firing gases from the thruster (T) will be for a very short period.

The process of alignment adjustment will be continued to be performed periodically whenever it becomes necessary. The photoelectric cell sensor disc will keep detecting its position with respect to the Sun.

The direction of the camera and antennas can be adjusted automatically by use of a computer control system.

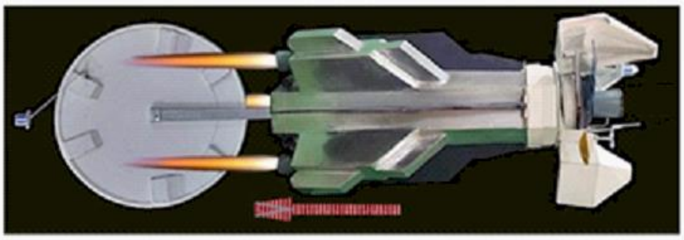




When it reaches within the Moon's gravitational field, it will start reducing its speed. During liftoff from Earth, the spaceship was able to add to its speed with the rotational speed of Earth. The initial speed of the spaceship is likely to be just more than 11.2 km/s. The Moon's escape velocity is 2.38 km/s. So the spaceship has to reduce its speed to between 1.50 km/s and 2.00 km/s and try to pass further from the Moon. Its locking system with the Sun's rays will be stopped to let it get pulled to the Moon by its gravitational attraction.

When it is approaching the Moon, the position of the Moon is at perigee, which is closest to Earth (about 363,000 Km). It will take about 3 days for a spacecraft to reach the Moon.

Applying brakes to slow down speed



Before landing on the Moon

The spacecraft will be placed in the Moon's orbit by using existing technologies.

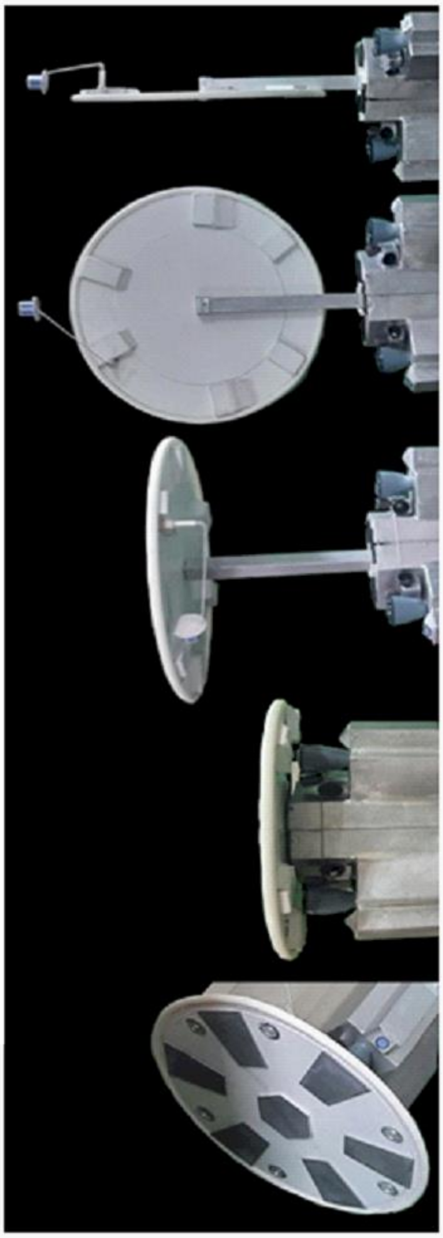
The onboard camera and sensors will scan the Moon's surface to locate a suitable landing location. When it approaches the selected location, its top nose end will close after rolling back all the expended gadgets. Thrusters P1, P2, and P3 will reduce its speed to almost zero so that it will start falling towards the surface of the Moon due to the Moon's gravitational attraction.

During landing on the Moon

Immediately after it starts moving down, the following maneuvering steps will be performed to prepare it for a smooth landing.

All these steps will be completed in less than five minutes.

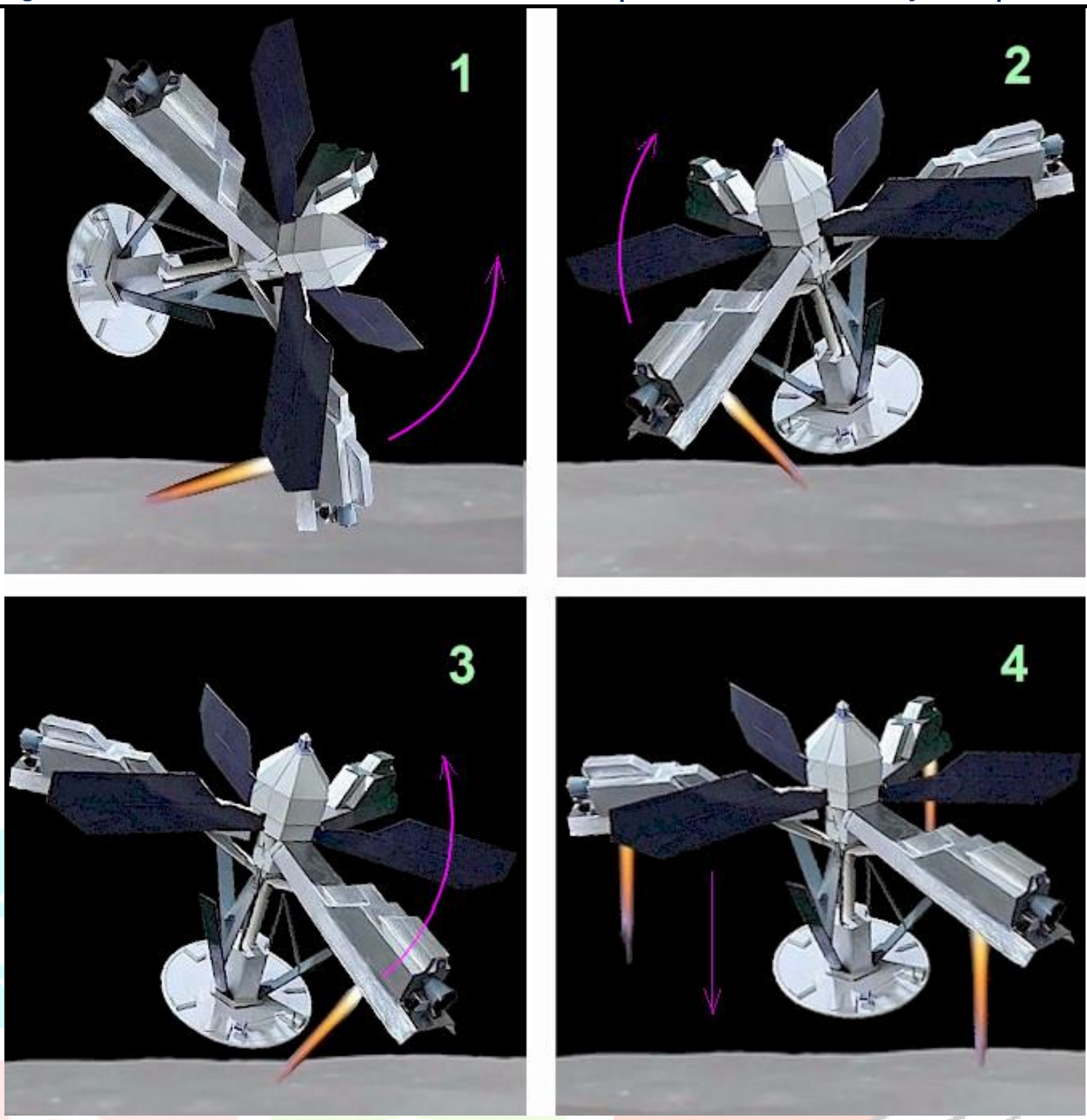
< It will move the heat protection disc back to its base.



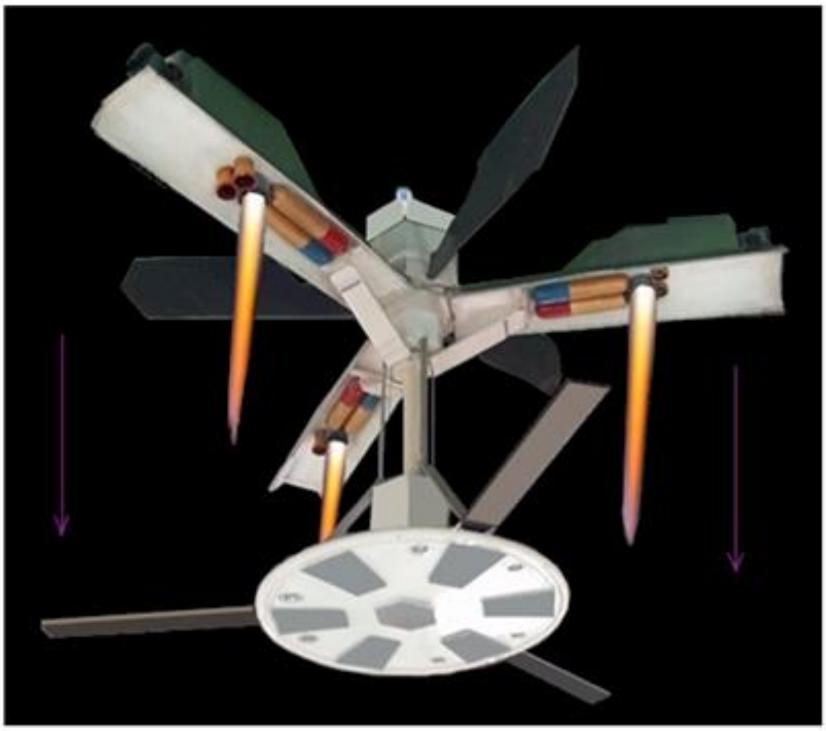
> It will open its three large fins and lock their positions.

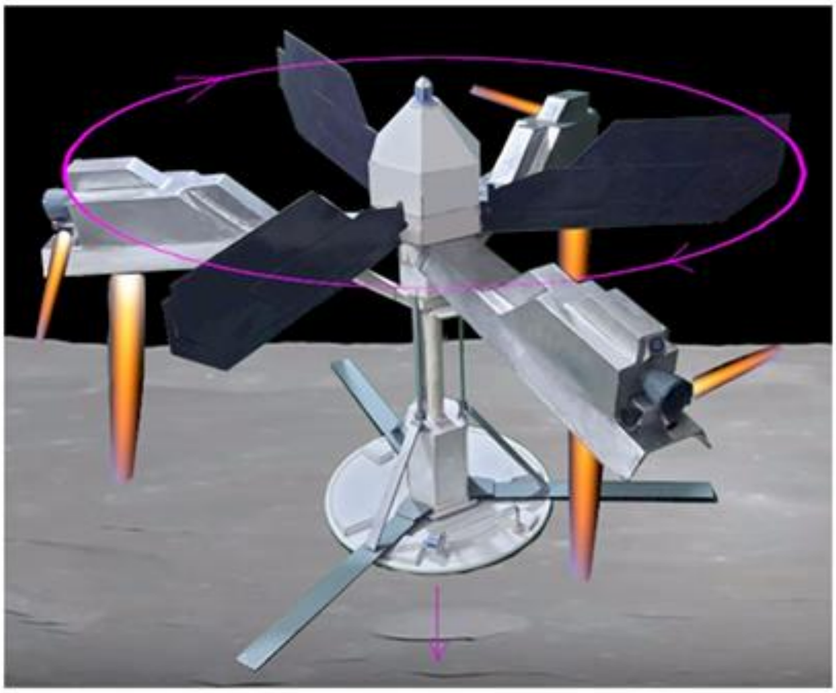
> It will open its three arms that are containing all the thrusters of its base and major part of fuel storage.

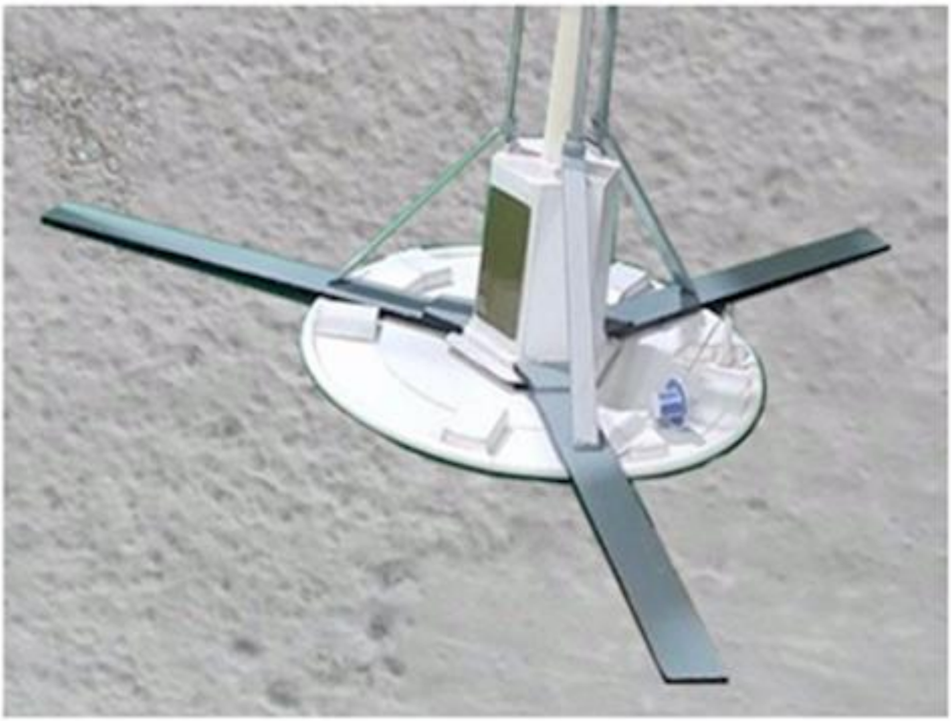
> It will expand its legs and start adjusting its position with its axis perpendicular to the Moon's surface.



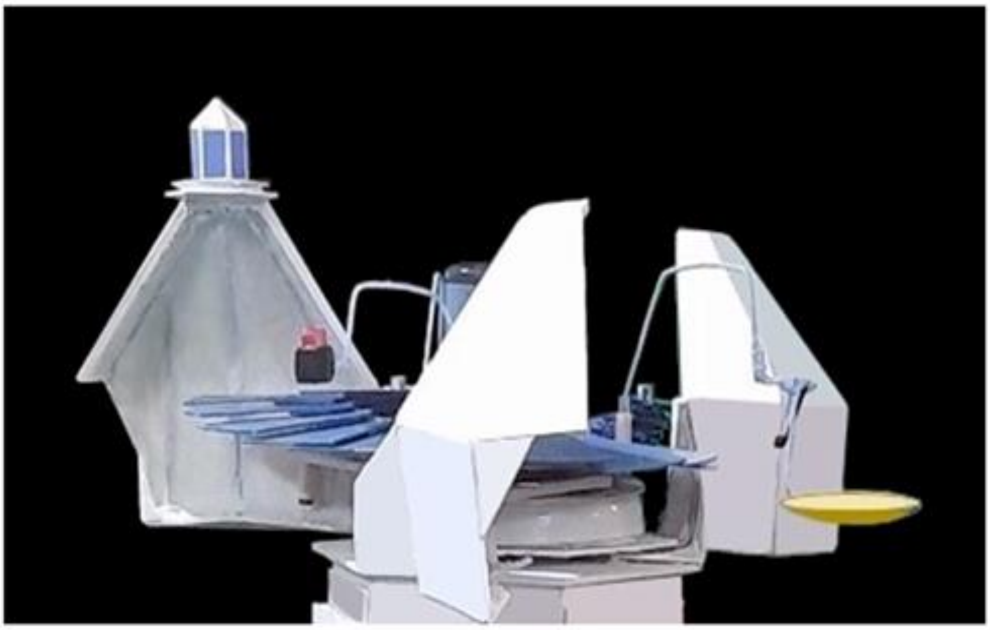
It will perform a landing on the Moon at the location where sunlight is approaching. On the basis of the known direction of the Sun with respect to the Moon's surface, the photoelectric sensor disc at its top end will keep adjusting its position for smooth landing.

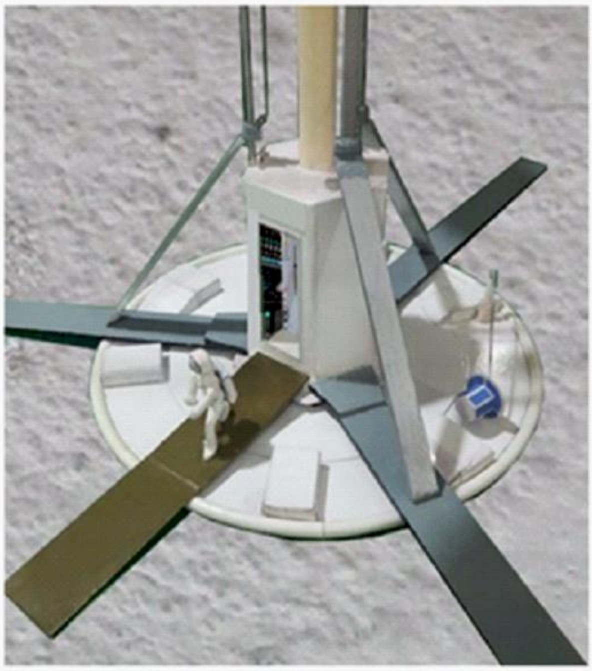




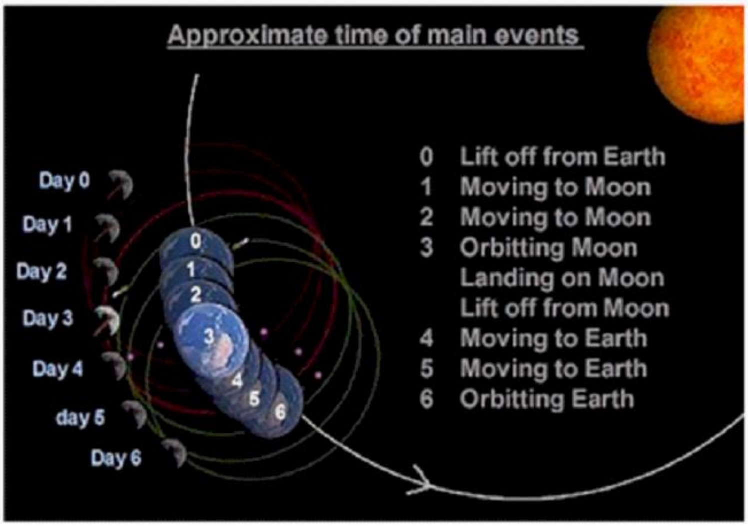


After landing it will open its nose end and reposition its gadgets.



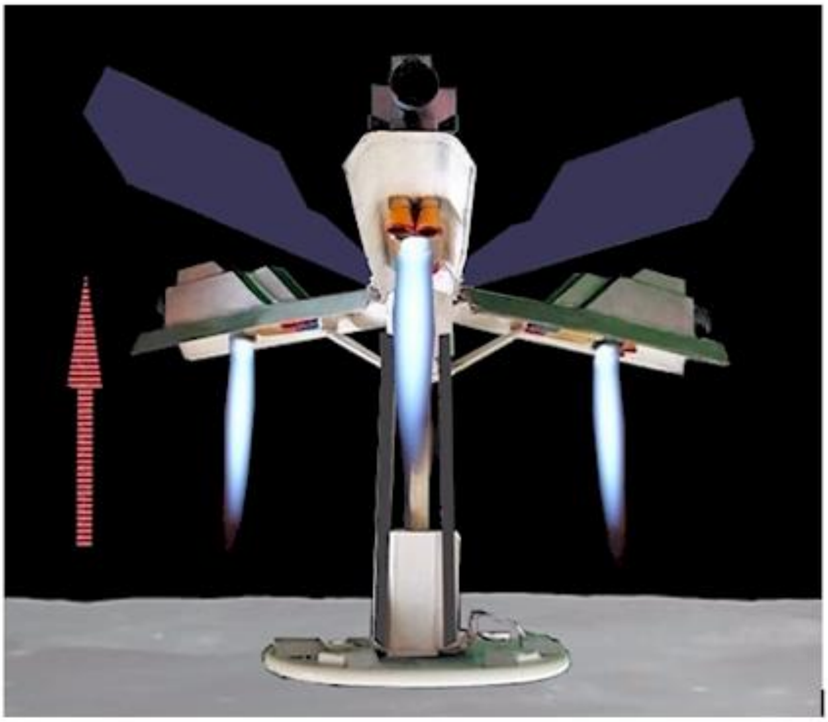


During return from Moon

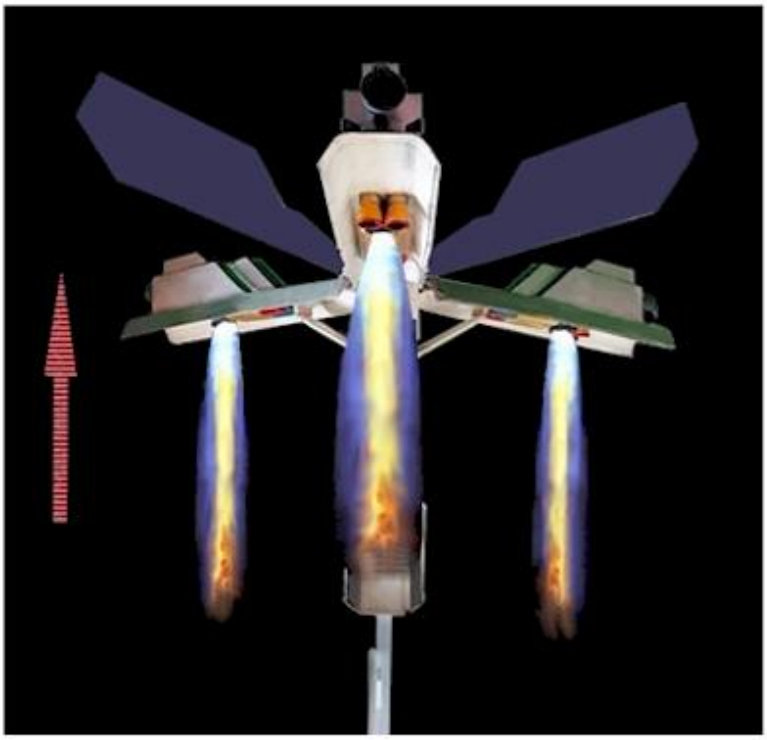


Different positions of the moon and earth during the travel of the spacecraft from Earth to the moon and back to Earth. During travel from Earth to the Moon, the spacecraft will travel away from the Sun, and during the return to Earth, the spacecraft will travel towards the Sun.

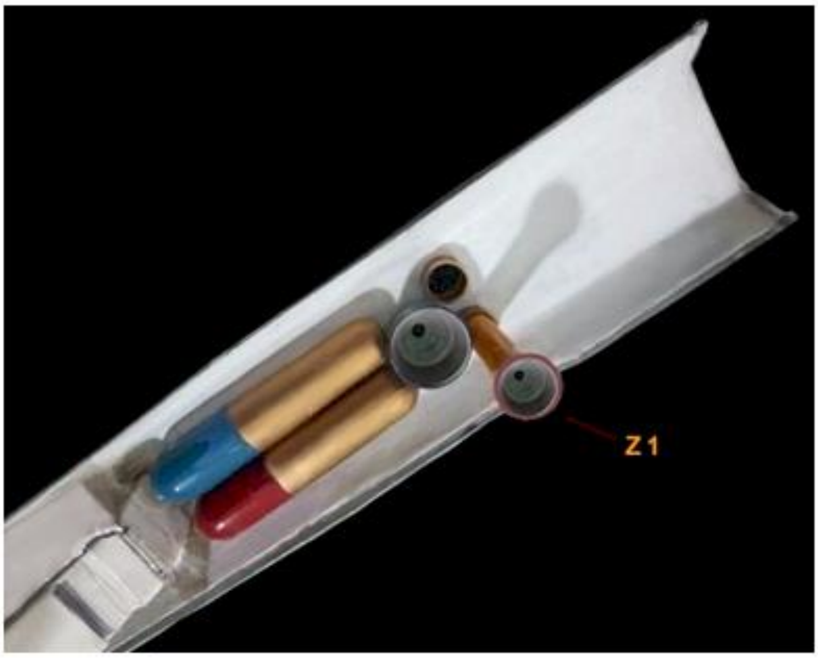
In the course of return from Moon

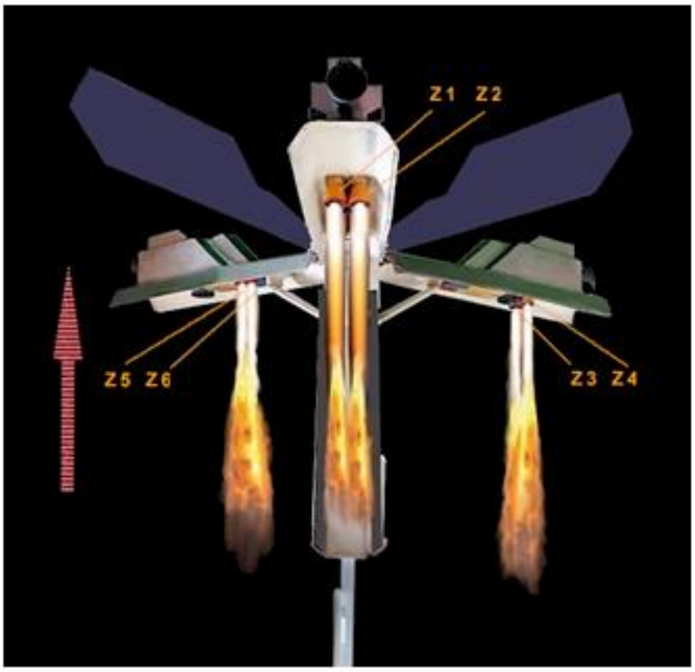


It will reposition its large heat protection disc to a vertical position.

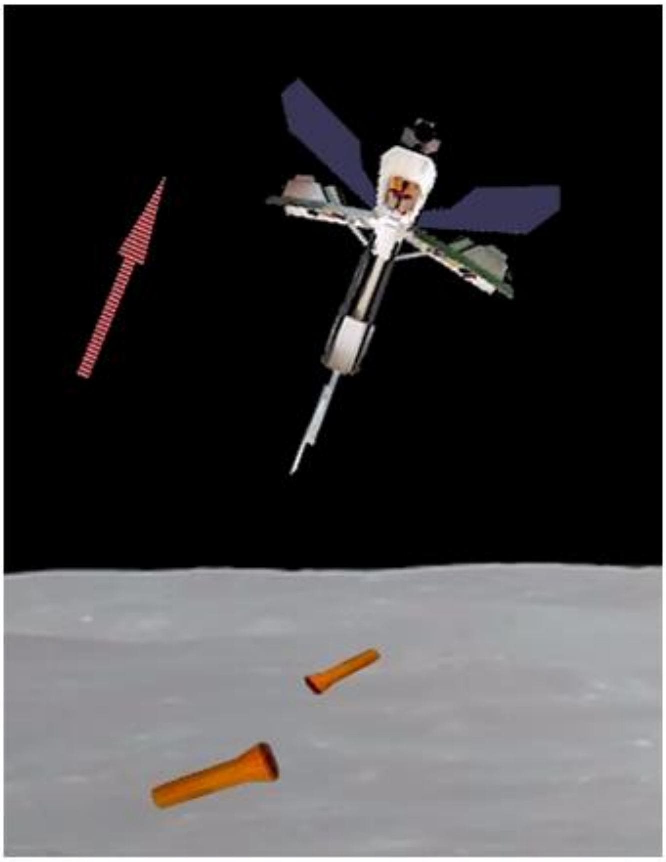


It will use specially designed six solid fuel propellers (Z1- Z6) to give it sufficient thrust to cross Moon’s escape velocity. These thrusters will be left behind after their use.



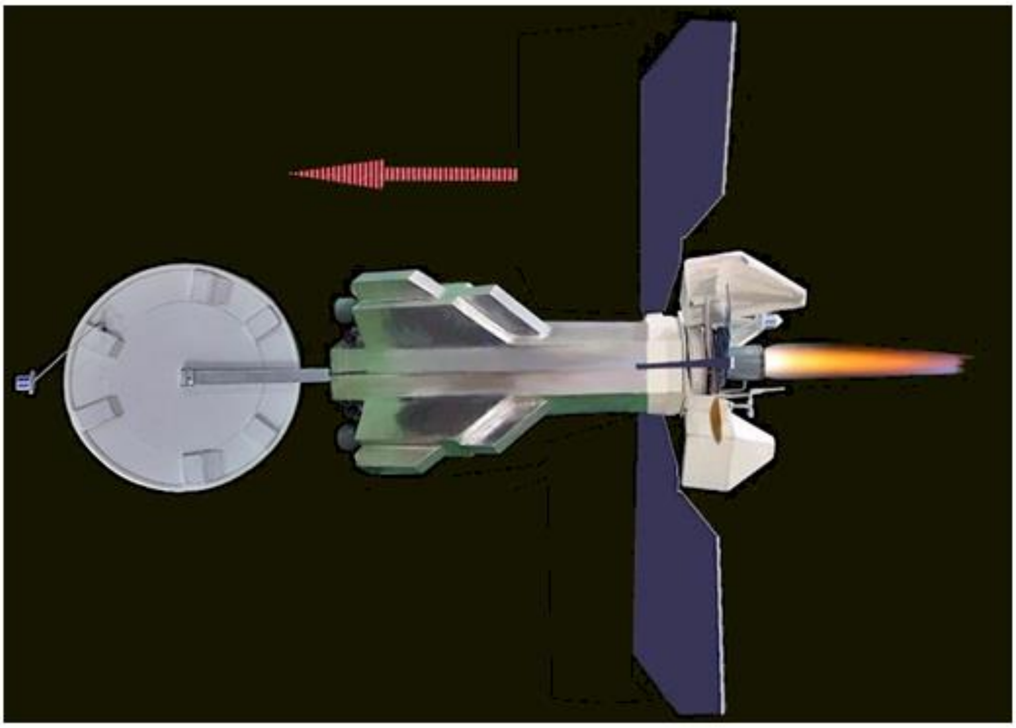


The Moon's escape velocity is 2.38 km/s, which is much lesser than the 11.2 km/ escape velocity of Earth. So, when it is moving towards the Sun, its speed will be about 2.50 km/s.



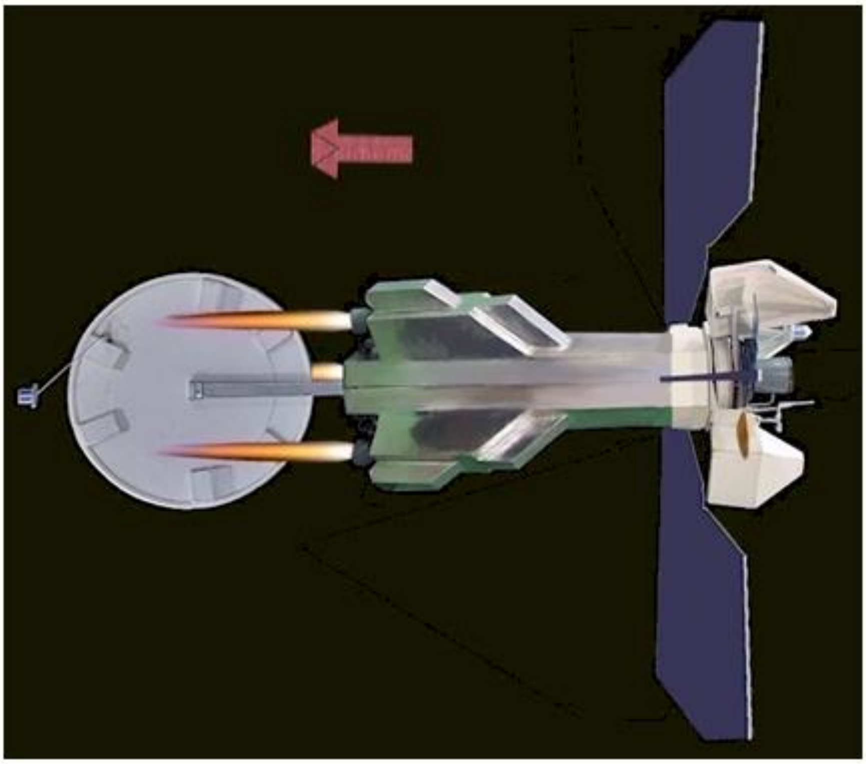
It will fold back its long arms.

Adjusting direction towards Earth.

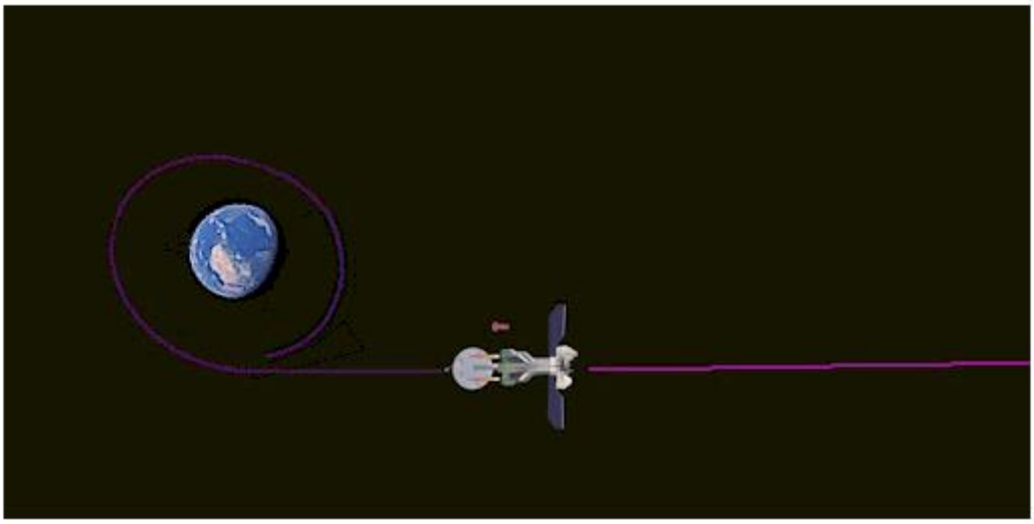


When it will come within Earth's gravitational attraction area, its speed will start increasing due to Earth's attraction.

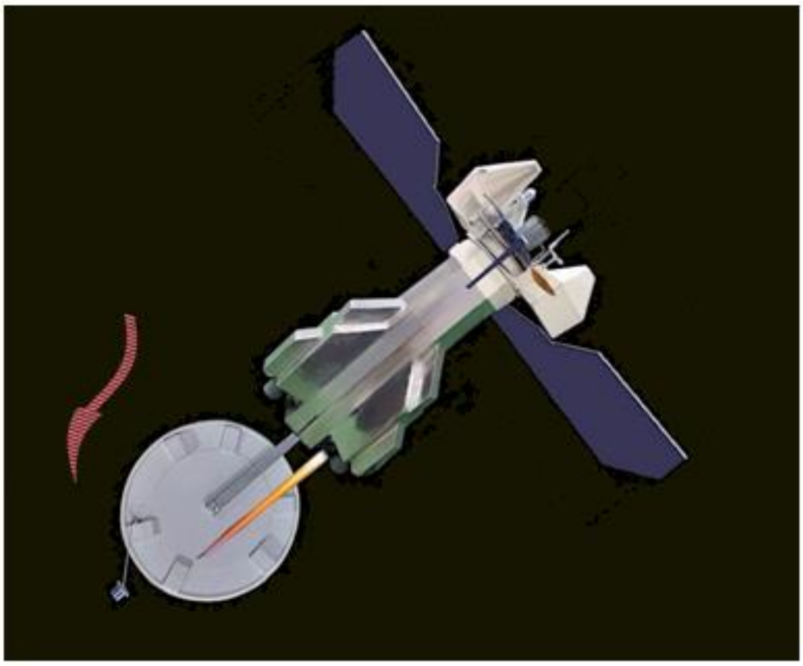
Applying breaks to enter Earth's orbit

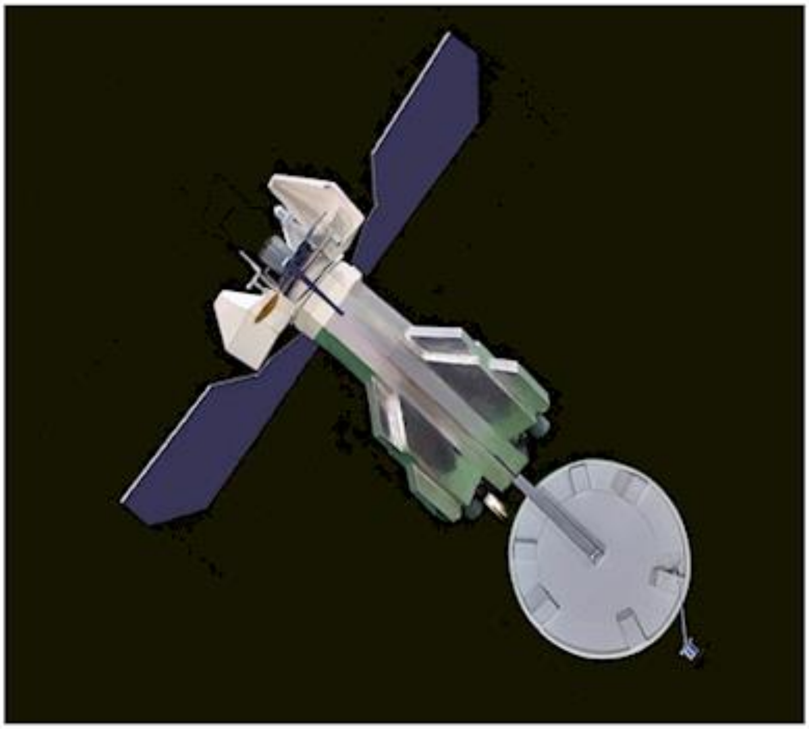


Approaching Earth



While orbiting Earth, it will position the heat protection disc with its base.

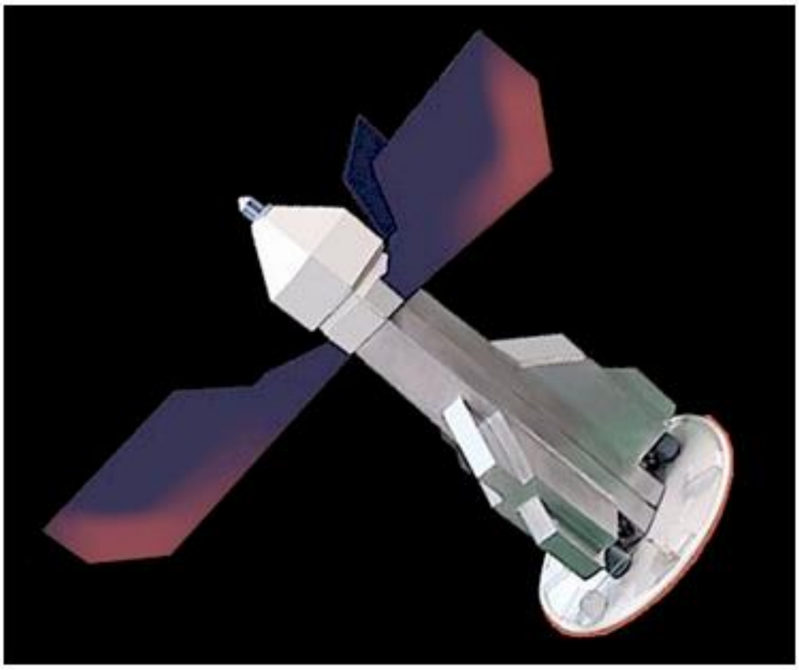




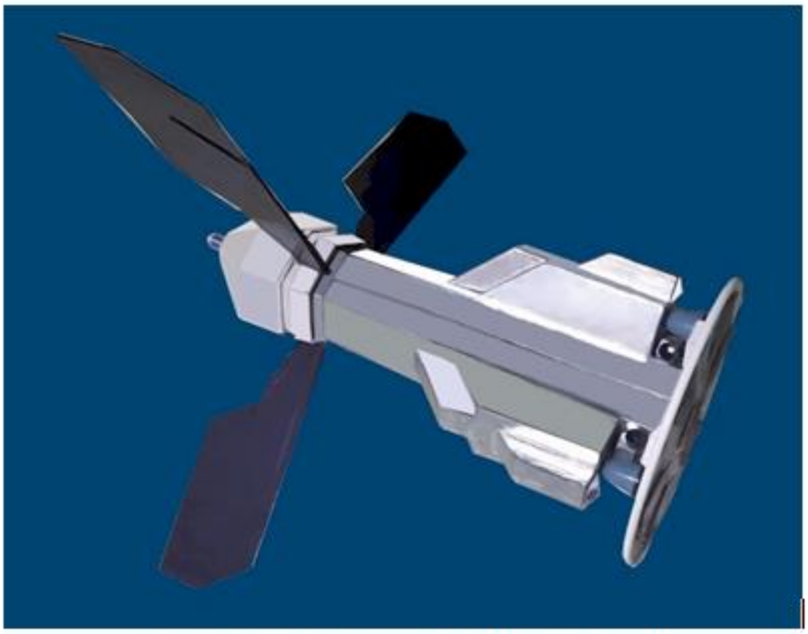
Going through exosphere

Going through Thermosphere

Exit from Thermosphere

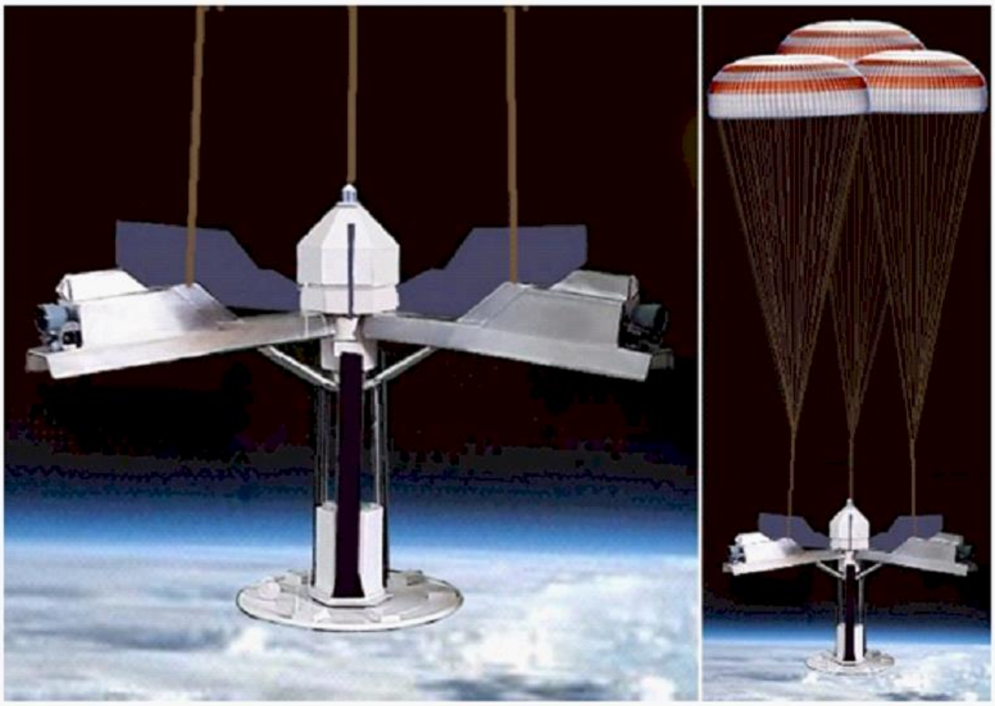


Entered Mesosphere

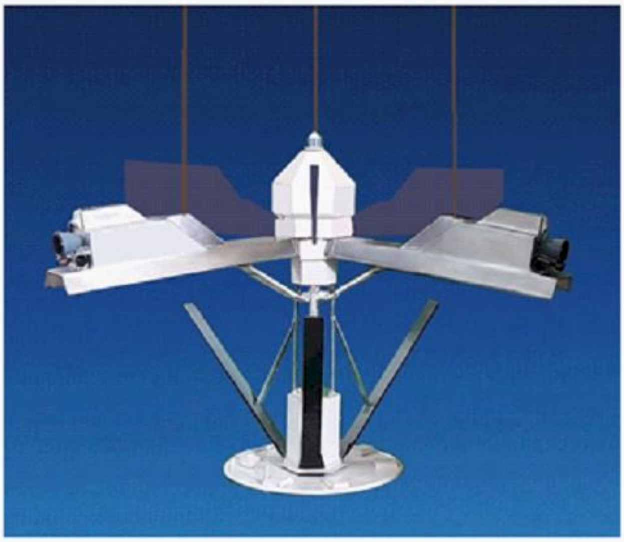


Applying breaks to slow down descend.

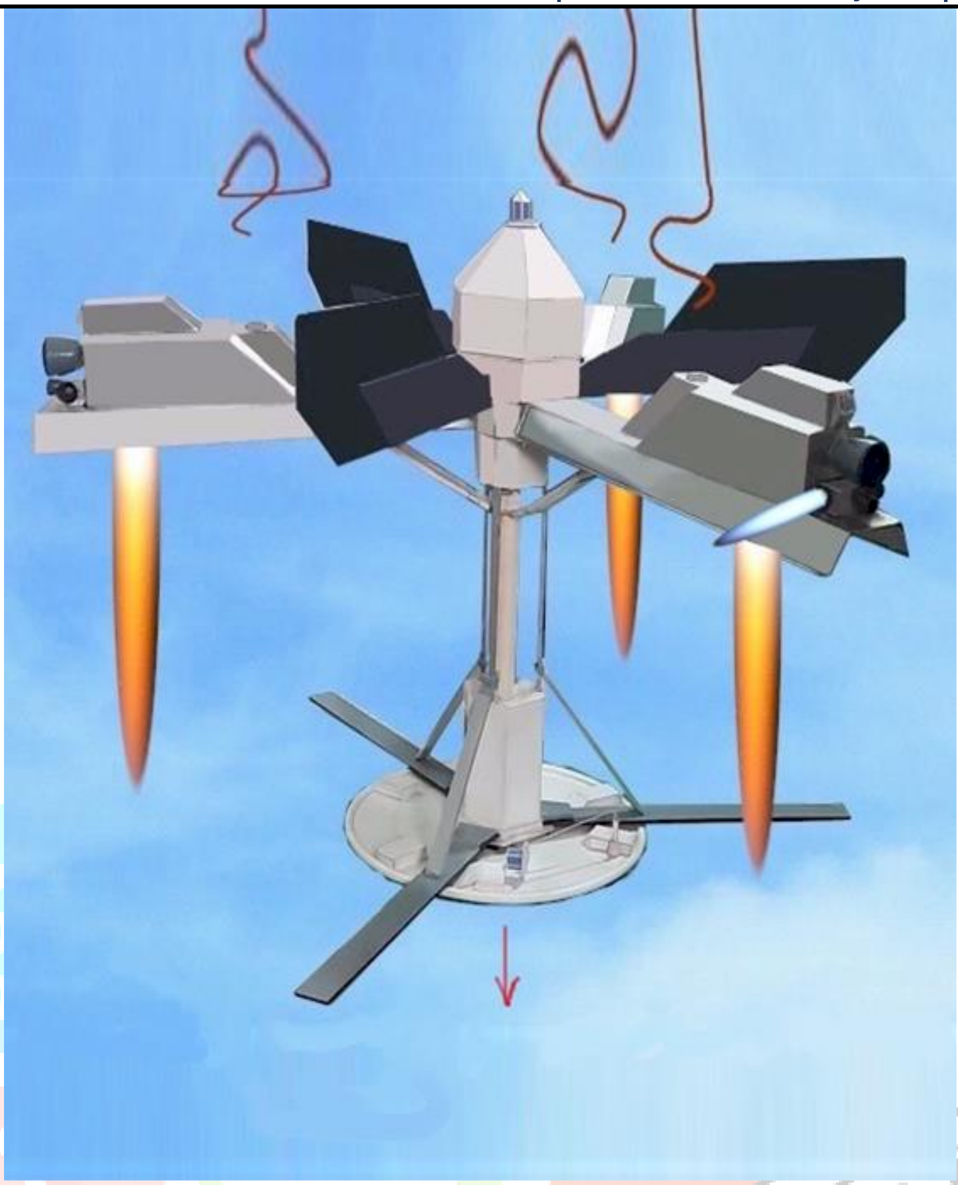
3 sets of smaller parachutes will be opened from its upper parachute containers while it enters the stratosphere. After it has passed a certain distance and decreased its speed of falling, it will abandon the already opened smaller parachutes and will push out larger parachutes from its lower parachute containers.



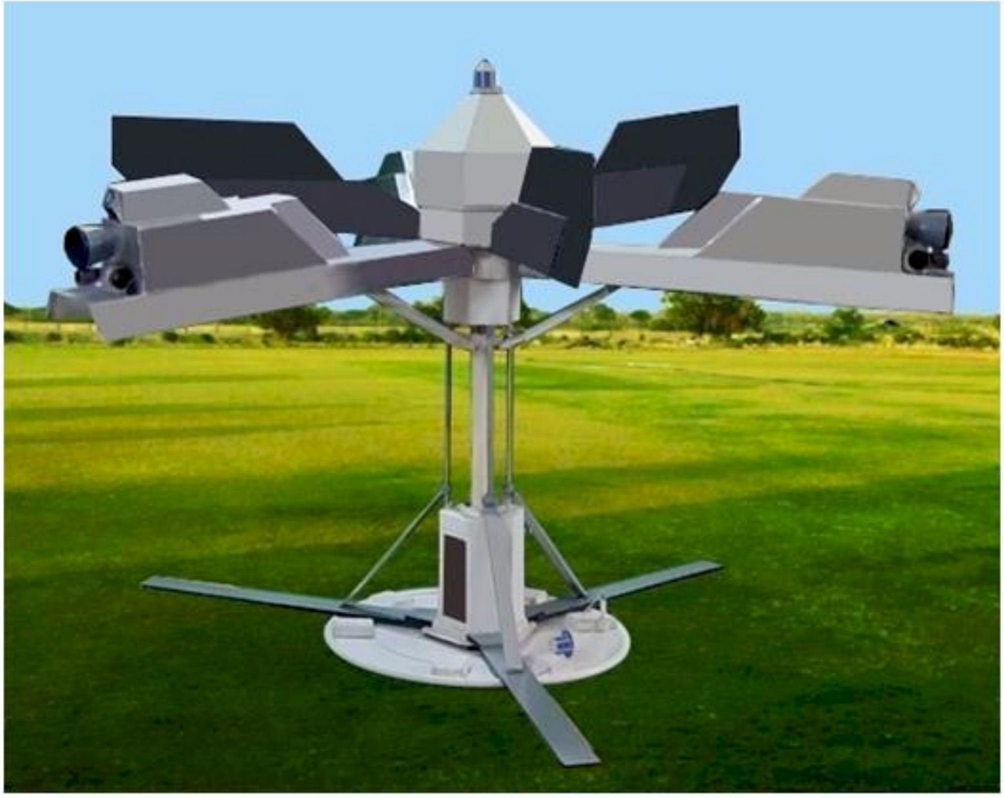
It will extend its resting legs

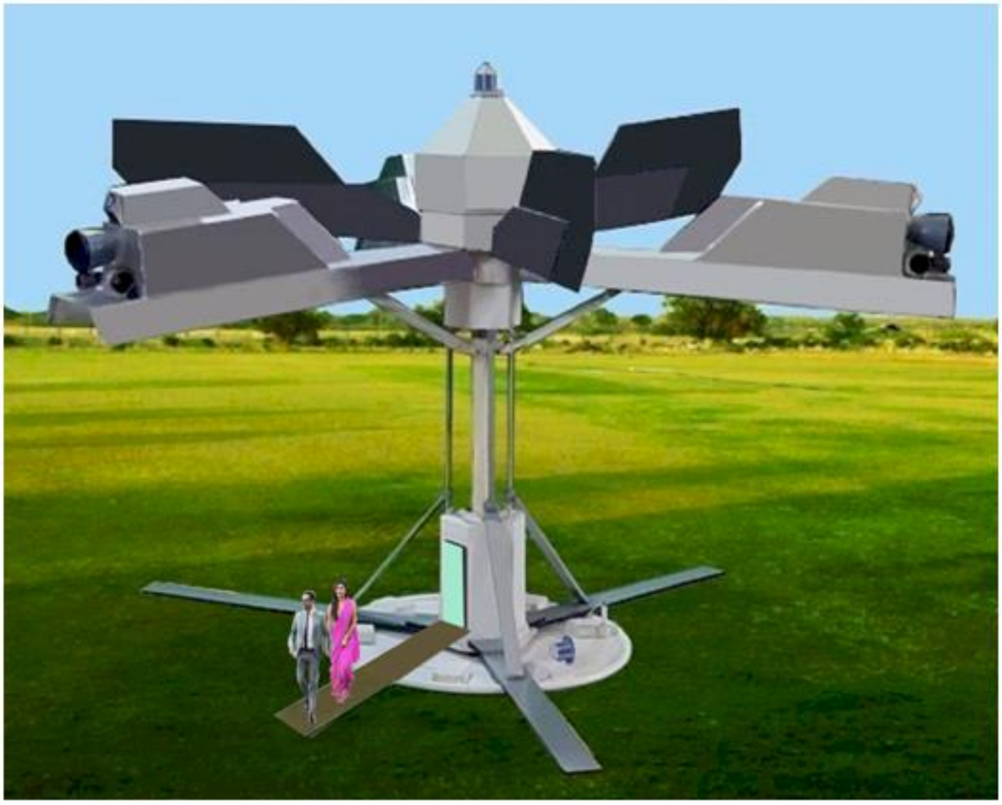


Moving to the desired location for touchdown



Imagination is the foundation for creative thinking and innovation, allowing individuals to generate new ideas, solutions, and approaches to problems. It enables the development of novel inventions, artistic expressions, and unique perspectives. By encouraging divergent thinking, imagination helps break free from conventional limitations and explore new possibilities.





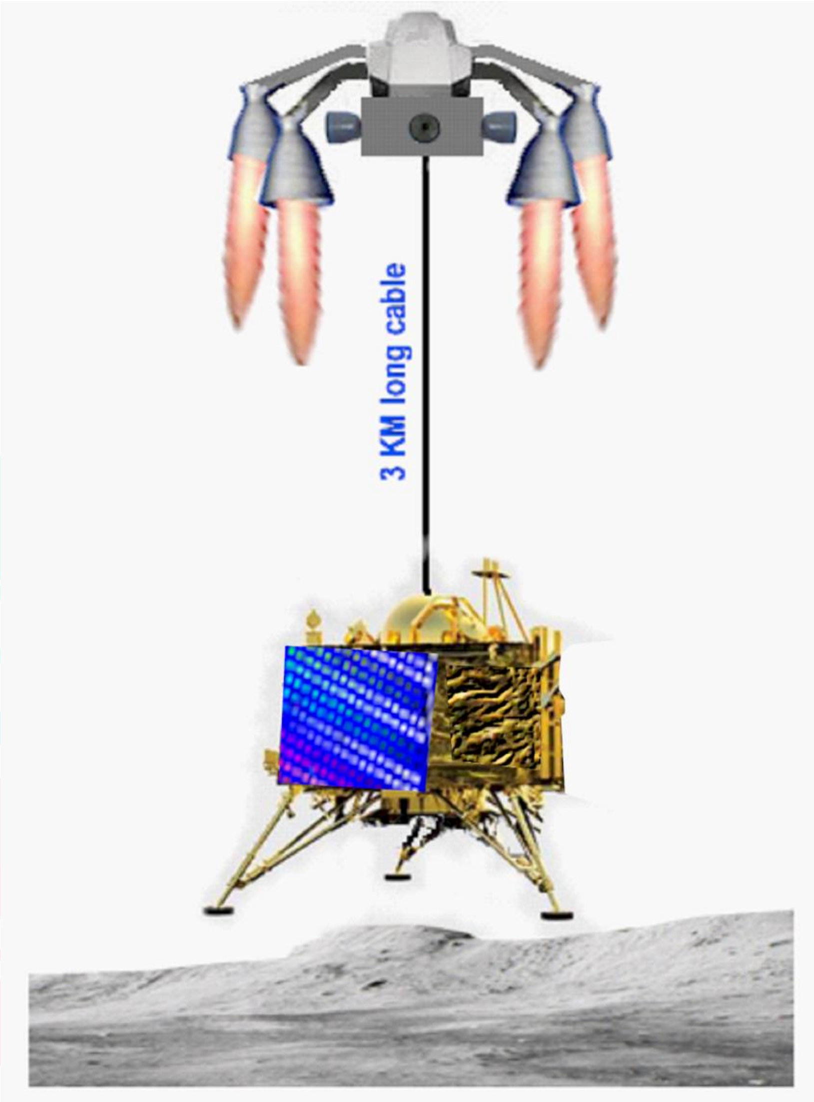
2047

New concept for soft landing of Lander for planets having no atmosphere

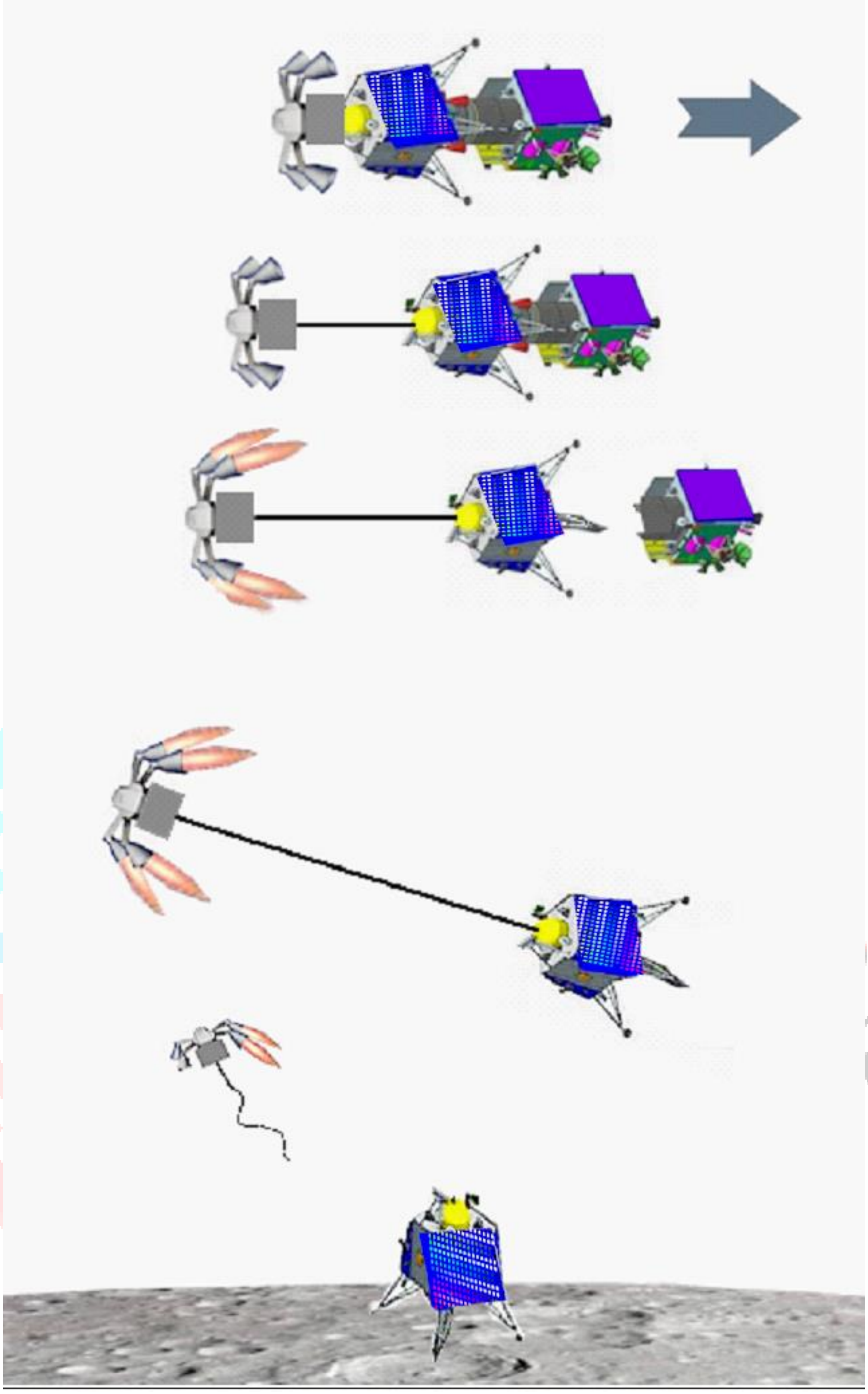
Mostly, the design of Lander with 4 legs and gas thrusters at its bottom is shown for landing on the Moon. Since the gravity of the Moon is too low and there is no atmospheric air, the backward push by the reflected gases of the thrusters, along with some large particles of lunar dust from the surface of the Moon, can disturb the balance of the Lander when it is closer to the landing surface.

Another alternative approach for sure success

The thrusters, which have been positioned at the base of the Lander, should be positioned at a distance of about 3 km above the Lander. The lander should descend like a parachute. The Lander can be made to hang with the Gas Drone by long cables of some heat-resistant material. The gas drone can also have 4 small horizontal gas thrusters at its 4 sides to control its horizontal movement.

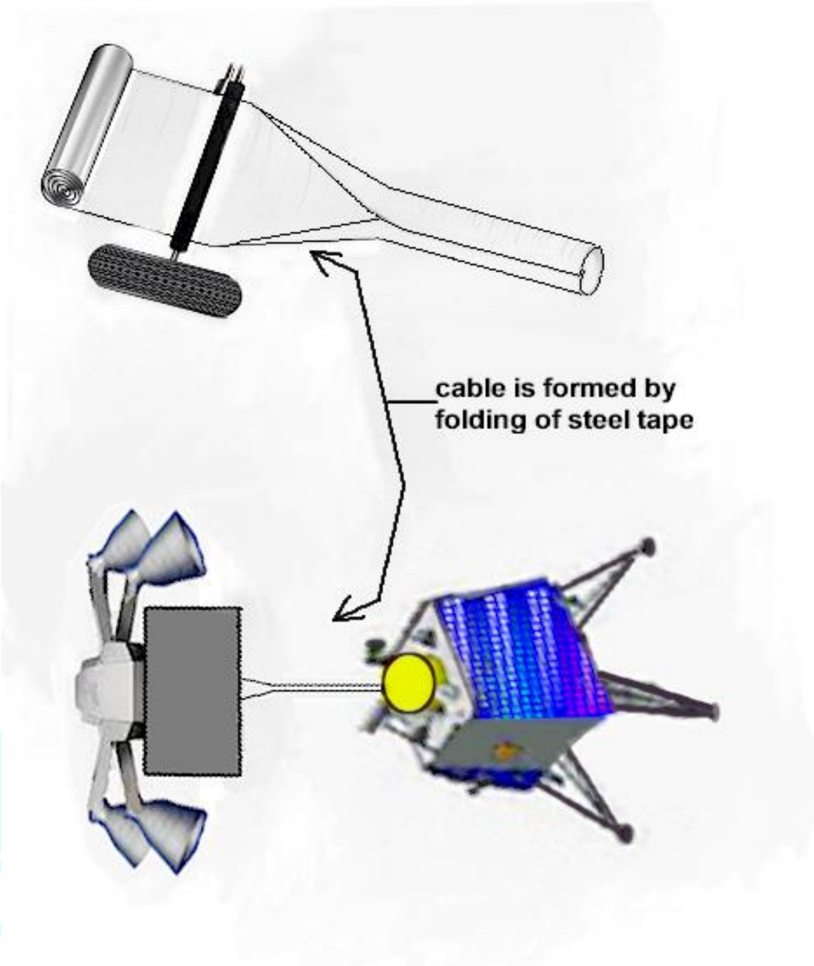


The lander and gas drone are getting separated from the orbiter.



Once the Lander touches ground, two adjoining thrusters of the Gas Drone will stop operating, and within a second, the remaining two will also stop. Simultaneously, the connecting cable will get detached from the Lander. This will help the gas drone fall away from Lander.

Steel cable extender



The gas drone unit is being pushed away from the Lander to a safer distance before the blowers are activated. It is being pushed away by a steel tape that gets folded to form a cable pipe by using the mechanism of a folding carpenter ruler.

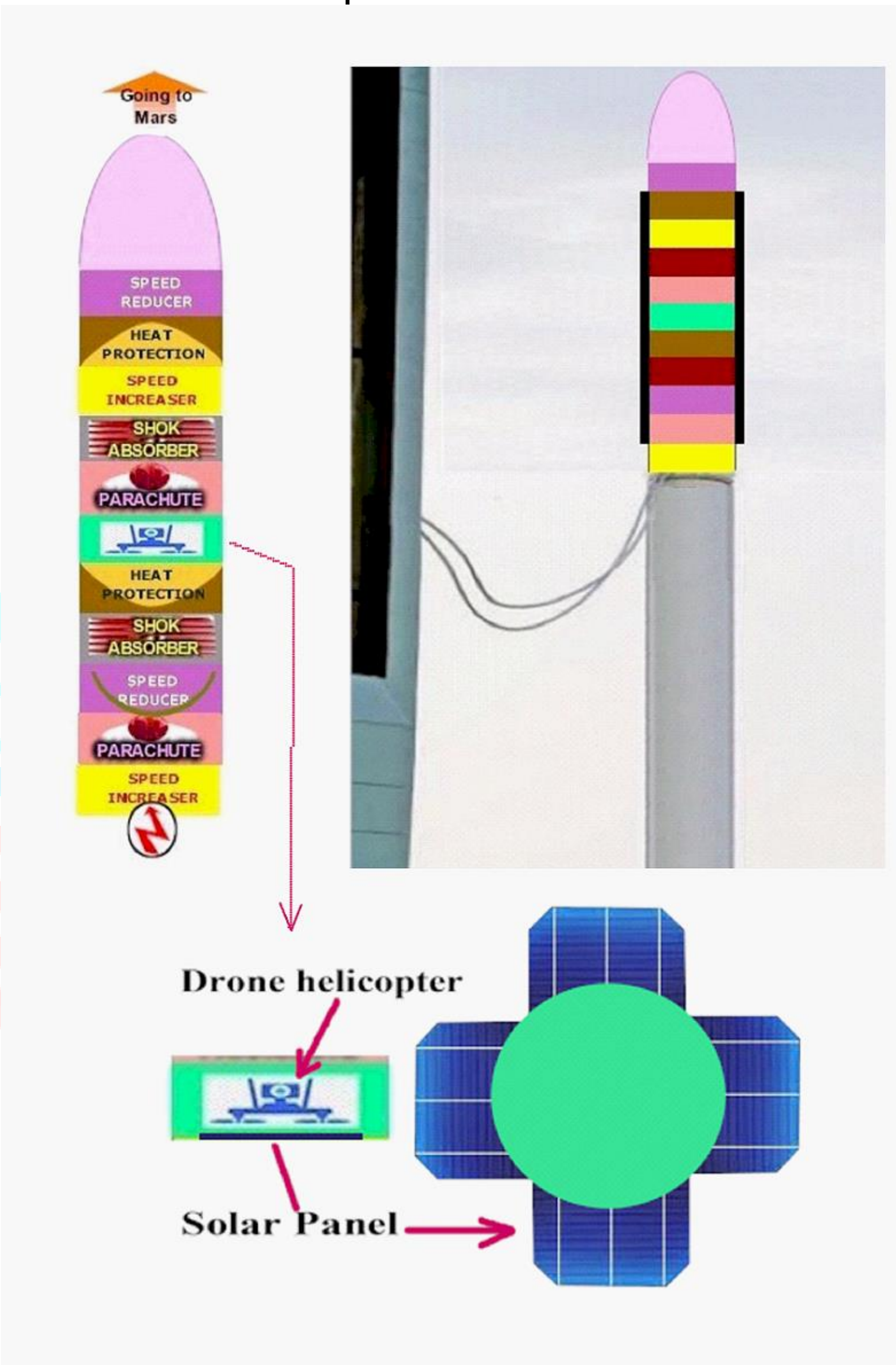
Such a procedure of using steel pipe arms that can be extended to very long distances and can also shrink back will be very helpful to create space station builder robot arms. Such types of steel pipe arms can be used during the capture phase, where a docking mechanism locks the two spacecraft together. It can help capture approaching spacecraft by magnetic attraction from a distance of a few thousand feet and bring them closer to the main robotic arms.

Also, during unfortunate lost contact with the International Space Station during a spacewalk, such a procedure of steel tape-based robotic arm can be made to reach the helpless astronaut in the shortest time, even if the astronaut has drifted away for a considerably long distance.

This tape-based robotic arm can also be used by a satellite to lower the camera nearer to the earth by a few hundred miles.

Journey to Mars and back to Earth

Departure from Earth



Expendable bifacial solar panels to get required electricity
and to keep it travelling parallel to the Sun's rays.

Main steps

Spacecraft will discard the used parts from its both ends indicated by different color blocks.

1 2 3 4 5 6 7

Lift off from Mars

The spaceship will be capable of using nuclear-powered propellers as speed increasers and speed reducers. It can be made to reach Mars in a month’s time.

More from Inderjeet Rishiraj

Rishiraj Biofield Effect
https://www.ijcrt.org/papers/IJCRT2410065.pdf

The "Rishiraj Biofield Effect" refers to a theory suggesting that human biofields can exhibit a unique property where their radiating energy, under specific conditions, can create a kind of photoelectric effect. This effect, unlike regular light, is proposed to travel at variable speeds, sometimes faster than the speed of light. The theory further suggests that these biofield interactions can manifest as "ghost images" or shadow-like figures, potentially explaining certain phenomena observed in videos showing mysterious events.

This theory is presented as a new discovery challenging current scientific understanding, particularly regarding the speed of light and the nature of biofields.

The theory suggests that the energy from the biofield travels in curved paths, resembling whirlwind patterns, when manifesting these images.

Research suggests that these biofield rays (Rishi Rays) can be captured by older cameras with lower frame rates, suggesting that the energy requires a longer interaction time to create a noticeable effect on the recording medium.

The theory is presented as a novel discovery and a potential scientific explanation for paranormal events or phenomena associated with the human biofield.

One of the main strengths of this work is its bold attempt to bridge the gap between unexplained phenomena and the conventional scientific realm. The idea of "Rishi Rays" and bio-fields offers a fresh perspective on interpreting ghostly phenomena in a scientific context. Furthermore, the submission provides detailed accounts and analyses of various publicly available video recordings, adding empirical evidence to its claims. By tackling a topic often dismissed by the scientific community, the work encourages debate and dialogue, promoting a broader investigation into the phenomena widely reported by the public.

In closing, while this paper's premise may seem quite far-reaching within the current scientific paradigms, it nonetheless encourages open-minded exploration of the unknown. The paper can lead to curiosity-driven breakthroughs, even if largely outside of, or tangential to, the standard scientific journey.

The researcher is seeking a supportive environment with financial backing to develop experimental models that can demonstrate scientific proof.

Gravitational Attraction Is Not Real
https://www.ijcrt.org/papers/IJCRT21X0300.pdf

The paper proposes a provocative reevaluation of gravitational forces, suggesting that what we perceive as gravitational attraction is, in reality, a result of repulsive forces. This idea aligns with Le Sage's kinetic theory of gravity and challenges the conventional Newtonian and Einsteinian gravitational paradigms. The submission emphasizes the role of the smallest energy packets in shaping gravitational interactions, thereby providing an alternate framework to understand gravitational forces.

The paper's strengths lie in its boldness and originality. It challenges a widely accepted scientific consensus and presents a fresh perspective driven by intellectual curiosity. The manuscript also underscores the historical evolution of gravitational theories, tapping into lesser-explored concepts such as Le Sage's theory, which are not commonly discussed in mainstream academic circles. In doing so, it could stimulate broader interdisciplinary debates, encouraging reconsideration of gravitational theory foundations, particularly in the context of expanding astronomical evidence regarding dark matter and cosmic expansion.

Surgery Under Air Pressure Plus Blood Pressure
https://www.ijcrt.org/papers/IJCRT2501171.pdf

The paper titled "Surgery Under Air Pressure Plus Blood Pressure" presents a novel surgical technique aimed at mitigating blood loss during operations. The approach suggests conducting surgeries in an environment where the pressure is regulated to exceed the sum of atmospheric and blood pressure at the surgical site. This will reduce or eliminate bleeding, potentially lengthening surgery time without added risk to the patient. The concept builds on fundamental principles of fluid dynamics and pressure differentials.

The paper introduces a creative method to potentially revolutionize blood management in surgery, addressing a critical concern in surgical procedures. The theoretical foundation is built around a clear understanding of pressure differentials and blood dynamics. Additionally, the paper opens a promising dialogue on innovations in surgical environments that cater to safety and precision while reducing dependency on blood transfusions. The potential added advantage of not requiring patients to halt anticoagulant treatment during the pre-surgery stage suggests significant clinical benefit for specific high-risk groups.

The manuscript ambitiously puts forward a thought-provoking approach that could lead to a paradigm shift in surgical procedures. There's potential for interdisciplinary collaboration that bridges biomedical engineering and surgery, fostering innovation in medical device technology.