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Editorial for Volume 7 Number 1: The Space Transportation

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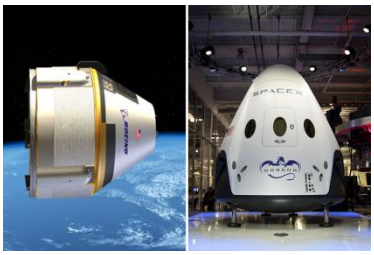
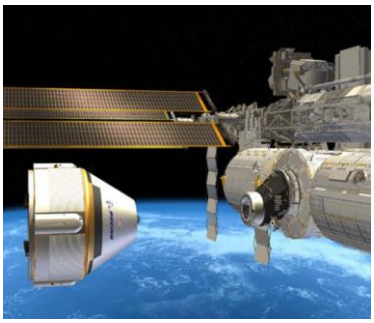
The problem of space transportation is to minimize the time, energy and economic costs of moving resources from one place to another in space, within the planets (in space flights) and orbits of the planets by spacecraft's ion propulsion or other conventional methods of propulsion. The spacecraft are: ships that use propulsion rockets and propelled by nuclear energy, space shuttles, space rockets, space planners and ships that use advanced HALL electric propulsion, national ships of space exploration, vehicles of automatic transfer of payloads, vehicles of launching non-reusable evolved, aerospace aircraft, transatmosfericos vehicles, orbital space planes and interplanetary spaceships. A mechanism based on chemical, solar or nuclear energy is required to transport resources through space.





Companies Boeing (ship CST-100) and Space Exploration Technologies (SpaceX capsule Dragon V2) will be in 2017 the transport of human resources of the United States to the international space station. Currently human resources is transported through the Russian missions of the Soyuzs at a cost of 70 million dollars per seat.

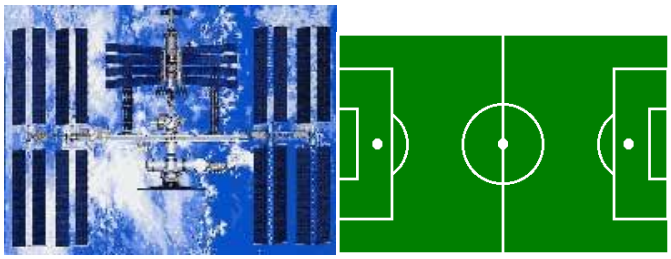
The CST-100 ship has the capacity to carry seven passengers and can land anywhere on Earth by parachute and air bags.

The Dragon capsule SpaceX v2 has the capacity to carry seven people, and can land anywhere on Earth with the precision of a helicopter.

International space of the port space Earth to the space station taxi (Images http://www.spacex.com/ and http://boeing.mediaroom.com/)

Resources which could be transported into space are passengers (human), military objects, workers, general cargo, fuel, oxidizer (liquid oxygen), propellants (is a type of oxidizer blended fuel that produces a hot gas), seeds, ground and various payloads.

Places where you could transport resources are:
· International space station: It is a research center in the orbit of a planet run by international or universal cooperation. For example: the international space station from Earth.



The international space station (ISS) is an experimental facility where they live and 7 astronauts perform experiments in space. The ISS gets electricity through solar panels using a remote manipulator system to carry out activities outside the space station.

The ISS is 108.5 meters by 72.8 meters (almost the size of a field of soccer. And weighs 450 tons (nearly the weight 450 compact passenger cars).

International space station (Figures of http://iss.jaxa.jp/kids/en/station/)

· Spaceport: Site where for business or Government services are provided for loading and unloading, loading and unloading of spacecraft operations. For example the space port of Earth, space port of the Moon and Mars spaceport.

Port space land America in New Mexico United States property of the New Mexico Space Authority (NMSA), is the international headquarters and control center of commercial space missions of UP Aerospace, Virgin Galactic, Moog-FTS, Microgravity Enterprises, Armadillo Aerospace and Celestis.

There are other space ports in operation and construction: Swedish Space port (http://www.spaceportsweden.com) located in Kiruna, where carried out operations Avico and Novespace enterprises. The space port of Brownsville in United States is owned by SpaceX.

Port space land America (Pictures of http://www.virgingalactic.com/overview/spaceport/

· Space operations centre: performs the activities of scientific space research, applied research for the observation of planets, management of planetary GIS, management of natural resources planetary, visualize and interpret spatial data for decision making, observation of planets, space and planetary climate and movement of tides, among others. For example: space operations centre terrestrial (Johnson Space Center in the United States, European Centre of space operations, Ecuador space operations centre), Lunar Service Center.

· Parking space: it is a site, lagrange point or stationary orbit in space where space vehicles may remain waiting for access to the spaceport. For example: L4 and L5 between the Sun and the earth-moon lagrange point (constitute points of stable equilibrium with respect to two planets or moons), point of lagrange L4 and L5 between the Sun and Mars-Earth, geostationary Earth orbit, geostationary Mars orbit.