Re: Near Earth Objects − a resource for the 21st century

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Why isn't our Selene/moon considered as a "Near Earth Object"?

Is there some other moon in ratio to it's planet that's nearer or more substantial? (I don't think so)

~ BG

Williamknowsbest wrote:

> Hundreds of Near−Earth asteroids (NEAs) asteroids whose orbits are close to Earth's orbit exist. They spend part of their orbits between 0.983 and 1.3 astronomical units away from the Sun. Total mass is in the trillions of tons of materials.
>
> Some near−Earth asteroids' orbits intersect Earth's so they pose a collision danger.
>
> Near−Earth asteroids are comparatively easy to access for spacecraft from Earth; in fact, some can be reached with much less fuel than it takes to reach the Moon. This makes them an attractive target for exploration.
>
> Two near−Earth asteroids have already been visited by unpiloted spacecraft: 433 Eros, by NASA's Near Earth Asteroid Rendezvous probe, and 25143 Itokawa, by the JAXA Hayabusa mission.
>
> Near−Earth asteroids are a sub−class of near−Earth object.
>
> I have described elsewhere the technology for anti−proton boosted micro−fission triggers for micro−fusion pellets.
>
> These pellets can be detonated in sizes around 1 tonne of TNT to many megatons of TNT.
>
> Shaping the fusion fuel − typically Li6D − allows shaping the shock waves produced by the blast. Spherical patterns of fusion fuel produce spherical shock waves. Rod patterns of fusion fuel entrain

pancake shaped regions in directed shock jets. Pancake shaped patter of fusion fule entrain rod like regions in directed shock jets. .

The energy of the plast provides prompt production of ions streams along the shock lines, entraining well defined quantities of material, without appreciably heating the surrounding materials.

This allows the creation of well defined directed shock jets that use the energy from the fusion material, the body of the asteroid to impart delta vee to the remaining body of the asteroid.

Imparting as little as 200 meters per second (0.2 km/sec) delta vee to these asteroids, can be guided around the moon in such a way as to take up orbit around the moon, or take up orbit around the Earth, or float in one of the Lagrange points between Earth and moon.

Retrieval times is substantially less than 4 years in all cases.

So, retrieving materials in this way is the quickest, easiest, lowest cost, most direct, most profitable way to build up trillions of tonnes of orbital infrastructure within the next decade − without the need to mine the moon or develop a lunar infrastructure.

Here is how it is done;

1) Thousands of miniature fusion powered pulse units are made and housed aboard a spacecraft, totalling less than 10 tonnes total mass per asteroid retrieved.

2) These automated retrieval satellites are launched twice a month over a 10 year period.

3) They each orbit a chosen satellite and their team − herders − develop a recovery plan for the asteroid and carry it out − bringing the asteroid into a stable orbit in the Earth−Moon system.

4) solar powered tele−robotic factories are sent to the asteroid, to process the asteroid into useful materials. This builds up fuel depots, vehicle stages, space habitats, and so forth. This is the first stage.

5) expanding on the tele−robotic capabilities provides for commercial development for export to Earth of some of the better situatied asteroids. Power satellites are built on orbit from captured asteroidal feedstock, that beam microwave and laser energy to receivers on Earth. As capacities and income expand, rail guns or some other mass driver technology, exports raw materials directly to Earth guded to end user sites via GPS. This export starts with raw materials like smelted metals, and moves quickly as capacity improves, to industrial goods, finished goods, consumer goods. Pressure vessels are built cheaply on orbit from captured feedstocks, permits raising

telerobotic farms and forests and provide habitats for explorers and managers alike. Eventually a growing food and wood capacity provide for export to Earth. Ultimately small cities of 20,000 to 150,000 are built in airtight geodesic spheres. These cities are then collapsed and driven to enter Earth's atmosphere. As the small towns descend, through the sky, they self−erect, and float in like a hot air balloon in the skies of Earth

http://en.wikipedia.org/wiki/Cloud_nine_(Tensegrity_sphere)

Powered by laser beams from space, and supplied with food, and extracting water from the atmosphere, these cities provide housing and tele−robot jobs for up to 3 billion people − transforming life on Earth.

Allowing 3 years for micro−pulse and sapcecraft development, the entire process could start with technology today, and we would have thousands of Cloud Nine cities operate as aerial warehousing and distribution and manufacturing centers for space based production in 15 years from today.

Ultimately, with abundant space based resources, along with efficient laser beaming of infrared energy from orbit, laser powered propulsive skin technology is developed on orbit, and billions of spacecraft are sent to Earth to provide ballistic transport as well as easy access to orbit. The destination of the orbiting spacecraft are space based homes − space stations several thousand acres in area, owned personally by individuals and families, and tended to by tele−robots who hire people on a time−multiplex basis − to provide a wide range of skils and capabilities − on each 'estate' − using labor very efficiently.

By 2025 we could end poverty, war, pollution and privation for all people. It requires the development of no new technologies or the resolution of no unresolved problems.

William Mook

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