

Re: National Space Intelligence Center proposed

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- *From:* "American" <samuelransom@xxxxxxxxxxx>
 - *Date:* 28 May 2006 08:42:43 -0700
-

Hyper wrote:

American wrote:

William Mook wrote:

At some point the commercial sector will supersede the civilian, military, and intelligence sectors in space development. When that happens, we have to make sure that the commercial developments don't come back to bite us in the ass as a nation, or a world. After all, a colony in the asteroid belt could quite easily reduce the surface of the Earth to molten slag while remaining beyond the reach of Earth's military might.

Hyper wrote:

Please someone get on the line with the Men in Black now, now, NOW !
And get Captain Kirk out of retirement too.

Nice attempt at pulling a rabbit out of a hat – next trick?

Oh, come now, gentlemen, it's a little more complicated than that! Surely, the earth is no prison detainee central from which all must report to before leaving the solar system! Is there no joy in your hearts for advancing the science of propulsion to the asteroids? Surely, you jest, William Mook! You have studied my posts closely about the asteroid mining parts, but I wouldn't imagine that this little NSIC proposal would have anything to do with that, would it? However, let's assume that your case in point would be just that – that some fledgeling colony of intrepid survivalists did happen upon the technology to crash an asteroid into the earth – wouldn't that be the Wormwood that prophecy speaks of? – And maybe that evil angel of light Satan is inside?

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EEUWWHH – methinks this has nothing to do with advancing the wrong technology more than advancing the "needed" technology, so why shouldn't we be altering the course of human history for the better rather than for the worse? Let's assume that security proposals always follow in lockstep with revolutionary technology. Would the accidental discoveries of Dynamite been invented? Gravity? X-rays? Velcro? Maybe we're assuming that only true prisoners trapped on an asteroid don't have the ingenuity that pioneers have – therefore they rebel against the enemy that sent them there – the whole earth. O.K. – granted – if this was the scenario – but I don't believe that it is the scenario or should be the scenario in the situation just described.

Hyper wrote:

Dynamite and velcro were not "accidental" discoveries. Nobel blew a lot of real estate before coming out with a stable enough stuff, so you might say he was actively looking for it. The inventor of velcro got the idea from thistles in his dog's fur. Gravity was not a "discovery".

Definition of Accidental:

Inadvertant occurrence or appearing or singled out by chance.

Velcro:

<http://www.scholastic.ca/titles/accidentaldiscoveries/>

Nobel capitalized on what was already his accidental discovery:

<http://www.nonwoven.co.uk/reports/History%20of%20Cellulosics.html>

Gravity is accidental enough through gravitic research:

<http://www.padrak.com/agn/>

Accidental discovery of gravity shielding:

<http://www.zpenergy.com/modules.php?name=News&file=article&sid=351>

Feel the Force, and Focus!

Asteroid Mining is an issue that deserves a moratorium on the subject, not only to educate the public, but also to prove that there is a genuine need to explore "our area" of the galaxy, not

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only for exploiting the use of extraterrestrial resources, but also to exhibit the need for long term research and development in providing an external sanctuary for "earthlings" in case of major disruptions in the earth's biosphere.

moratorium = temporary suspension/ban of an activity
"to exhibit the need for long term research" – you sure you an American?

The actual physical project takes a few years of planning, so this planning stage would act also as an moratorium:
Reinvent what a PAC should mean to private industry w.r.t. cutting edge propulsion technology. Make PAC appointments conditional over creating a more massive earth-to-orbit technology, and rider a massive advertising campaign that would preclude any project work being done. With the rider as a secret political "hot" button, any renegeing on either the rider or project would divert all NASA funding into a *fail safe mode* of political blackmail for the PAC and supporters that refuse the deal.

In order for asteroid mining to be a business and career in itself, it would have to depend upon the exploitation of resources, such as primary and precious metals, in order to facilitate the creation of trade and resource exchanges, such as water ice (ex. from the moon of Jupiter (Europa), aerogel made from silica-rich regolith (moon or large asteroid), space mining equipment, satellite technology, and life support systems.

Hyper wrote:

What do you need water for? Carb-chondrites can supply enough, unless you want to terraform Venus or something. Mars or the Moon (a caveat here) can be sources of cheaper H₂O. Finally, if you're hung on Jupiter and big moons, Calisto would be a better choice – slightly lower g. & 500 times LESS radiation from the belts.

The Mars, Moon gravity fields too strong for establishing a supply route to the asteroids, Europa is a better source of "quick and dirty" water ice – Callisto would require too much drilling and filtration. Europa would therefore require less involvement in the extraction process.

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The need for making asteroid mining a profitable venture is based on a new gold standard for the colonies of the earth, just like it was profitable for explorers in the New World to stake their claim for God and country!

Hyper Wrote:

Why adopt a gold standard and then dump large quantities on the market?

Because its not your market! These are the colonies of the solar system! Besides, read the post again, idiot.

After the asteroid is mined, other uses for the asteroid could include utilizing the mineshaft as a storage facility or habitat preserve in case a future in-transit rendezvous or emergency landing was made.

Hyper wrote:

Asteroids won't be "shaft mined". Not the way you seem to think – spitted potato style.

<http://www.permanent.com>

<http://science.howstuffworks.com/asteroid-mining.htm>

<http://www.amazon.com/gp/product/0201328194/qid=1148824584/sr=2-1/ref...>

I never said they would, did I? Assuming a single X-ray per molecule of

65.122 KeV X-rays, with 1 mole of platinum equaling 195.09 grams, converting to kcal we have:

$((65.122)(1.602 \times 10^{-16}) / (4200 \times 195.09 \text{ grams} / 6.023 \times 10^{23} \text{ atoms}))$
= 7668.64 times the energy required for transmission. This also means that the incidental X-ray will penetrate the metal up to 7668 molecules

deep. Phased Bragg Planes will transmit radiation at the incidental wavelength of 0.190381 angstroms, from the above chart. The X-ray penetration thickness of the pure metal would be the interatomic distance of $9(\pi)Z/4$ (from Electronic Structure and the Properties of Solids, Walter A. Harrison, 'Solid State Table of the Elements') $\times 7668(10^{-10}\text{m}) = 4.227 \times 10^{-3}\text{meters}$, or 4.227mm. Therefore, no shaft mining, except for habitat preserve or storage facility.

The problem with you, Hyper, is that WE are not on the same wavelength.

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The feasibility of mining an asteroid is multi: First of all, we need a way to react quickly to an incoming asteroid if the need arises. For that to happen, we need nuclear space propulsion systems "on" and "outside" of high earth orbit for the Hohmann transfer, as well for establishing a base on the surface of an asteroid.

Hyper wrote:

Hohmann orbits are minimal energy ones, hence not suitable for "quick" missions.

High-eccentricity targets require Hohmann transfers, and a short mining season at aphelion The problem is in scheduling the rendezvous, not "how fast" the rendezvous occurs!

Secondly, regarding the exploitation of mineral resources, that if there was more of a need for macroeconomic ripples, you are allowed to disagree if you believe that the Federal Reserve sets the rates for platinum, which it would not if the privateers are the ones who set the price in the first place. Just because there is "policing" or "fear" that greed will run amok on earth is no reason to believe that the privateers are a bunch of pirates, either. You can arbitrarily set the price of platinum as low as you want, so the resource for platinum will then just "dry up" without replenishment." All this means is that outside of earth orbit, there are advantages to being closer to where the mining takes place.

Hyper wrote:

pri-va-teer (prie vuh teer') n.

1. a privately owned ship commissioned to fight or harass enemy ships.
2. the captain or a crew member of such a vessel.

Does private industry harass you? How about this:

Article I of Congress states: "You may, by force of arms, attack, subdue, and take all Ships and other Vessels belonging to the inhabitants ..." Are YOU the enemy?

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Perhaps most importantly, there are those that believe that the earth is moving into a pole shift during the years following 2001. The shift starts out gradual at first, and then becomes more pronounced after a few years. What this means is that our Sun is moving through the galactic plane into the oppositely charged side of the galaxy. This occurs every 25,000 years. When a pole shift occurs, the molten, metallic core of the earth tries to shift its position. As a result, there are an increase in volcanoes, earthquakes, and sunspot activity. The effects could be catastrophic. Asteroid mining technology could provide us with a way off the planet and to the stars in order to escape the cataclysm, if it was to occur.

With some sort of extraterrestrial economic infrastructure in place, the extraterrestrial environment becomes self sustaining, and competition between the cost of earth-to-orbit and colony raw materials, goods, and services creates a trade to be established between the colony and earth orbit. Therefore, the colonies automatically become self-sustaining and progressively separated. It is surmised that only with an improvement in the fidelity of electronic communications and supply of environmental resources between earth based, orbital, and interplanetary trading partners, can a healthy economy of extraterrestrial infrastructure be maintained. Without these direct communications between resource trading partners, the earth becomes progressively monitored and controlled thru excessive marginalization of profits by the establishment of trade laws between international bureaucracies.

Yet just short of planetary revolution, the law of supply and demand in an extraterrestrial economy will help to create incrementally affordable modes of communication and transportation. At this point in the trade of resources and technology, the law of supply and demand dictates that both earthly and extraterrestrial environments cannot become isolated from each other, as this may result in diminishing resources, marginalized competition, trade imbalances, scandal, and environmental disaster.

Naturally, there are obstacles concerning the bootstrapping of asteroid mining. Lack of economic focus for a long term research and development plan for implementing a much cheaper earth-to-orbit technology with massive lifting capacity for a no-holes-barred rush into the solar system; general ignorance of the government, public, and private institutions at large about

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technologies that revolutionize space transportation, providing an awesome opportunity for expanding the free market economy towards stellar regions of the galaxy; opening up an awareness for reestablishing the gold standard as the benefit for adopting trading partners within the solar system, as well as providing a new system of financial credit between those trading partners.

So how is it that our vision has become so shortsighted, as described by the current NSIC program? I contend that my original statement regarding upgrading private enterprise (RLV's) to competitive status with NASA will enhance the performance of promise markets in this field, not destroy them!

"It's time to change derbies for Stetsons and kick some mule butt!"

Hyper wrote:

Disregard previous comments – waste of time.

This is not your industry to be concerned.

"Thair's nuthin better than a healthy bitch slappin to make the world go round!"

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