

ANTENNA



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Christmas Greetings,



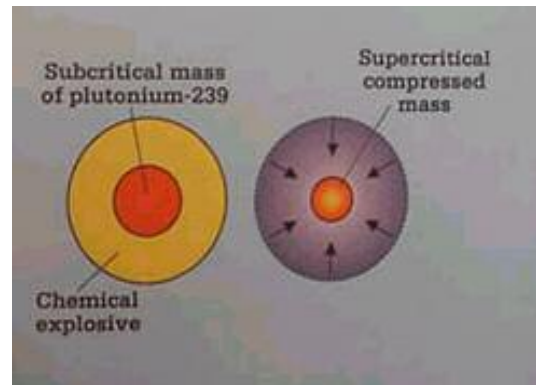
For this issue I hereby rename the planet Kenny to <Drum Roll> Kenny. Why? Well read on and all will be revealed.

Just in case I haven't mentioned it before, please send in articles, jokes, anecdotes – in short printed

stuff to pjt2@ihug.com.au for inclusion in future issues.

enormous pressures of Kenny's overwhelming atmosphere- Triggering a runaway *nuclear explosion!*

What van der Worp had suggested, in terms of Galileo, was merely a variant on the now well-known design of the "Fat Boy" plutonium nuclear weapon used against Nagasaki at the end of World War II -- an "implosion" plutonium reaction (below).



Oh no, we Nuked Jupiter Kenny.

By Richard C. Hoagland

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(Very) Condensed and edited by Peter Toomer

NASA's decision to finally terminate Galileo via a fiery plunge into Kenny, was designed in 2002 to prevent any possible biological contamination of this remarkable environment from a future random collision with the spacecraft, once its fuel was exhausted. The recommendation, from the National Research Council's Space Science Studies Board's "Committee on Planetary and Lunar Exploration" to NASA re the Galileo "problem," noted "This [procedure] is necessary to safeguard the scientific integrity of future studies of Europa's biological potential"



When NASA announced its "Galileo into Kenny" option, among those to publish immediate, serious was an engineer named Jacco van der Worp. Van der Worp claimed that, plunging into Kenny's deep and increasingly dense atmosphere, the on-board Galileo electrical power supply – a set of 144 plutonium-238 fuel pellets, arrayed in two large canister devices called "RTG's" (Radioisotope Thermoelectric would ultimately "implode"; that the plutonium Galileo carried would ultimately collapse in upon itself under the

The multiple layering of iridium and graphite surrounding the pellets have acted like individual heat shields, allowing them to survive the entry into Kenny's atmosphere – or so this theory goes. So basically as the pellets fall slower and slower through the atmosphere until at around the 700-mile mark (around 1125 Km) the casings gave way and the pellets imploded to a super-critical state.

The rate of a free-falling object in a planetary atmosphere is governed by an elementary equation, known as "Stokes law."

$$V = (2gr^2)(d1-d2)/9\mu$$

Where:

V = velocity of fall (cm sec⁻¹),
g = acceleration of gravity (cm sec⁻²),
r = "equivalent" radius of particle (cm),
d1 = density of particle (g cm⁻³),
d2 = density of medium (g cm⁻³), and
 μ = viscosity of medium (dyne sec cm⁻²).

If indeed this happened then we nuked Kenny, thus trying to kill him so we are – not nice people. What? You thought I was going to say 'Bastards'? Well even I have my standards and would never type such a word here – but obviously would 18 words or so back.

For the full story ...

<http://www.enterprisemission.com/NukingJupiter.html>

And for the super lazy ...

<http://www.newscientist.com/news/news.jsp?id=ns99994409>

IS THERE A SANTA CLAUS?



Is Hell Exothermic or Endothermic?

This is apparently true – this is the answer to the question “Is Hell Exothermic or Endothermic?”

"First, We postulate that if souls exist, then they must have some mass. If they do, then a mole of souls can also have a mass. So, at what rate are souls moving into hell and at what rate are souls leaving? I think we can safely assume that once a soul gets to hell, it will not leave.

Therefore, no souls are leaving. As for souls entering hell, let's look at the different religions that exist in the world today. Some of these religions state that if you are not a member of their religion, then you will go to hell. Since there is more than one of these religions and people do not belong to more than one religion, we can project that all people and souls go to hell. With birth and death rates as they are, we can expect the number of souls in hell to increase exponentially.

Now, we look at the rate of change in volume in hell. Boyle's Law states that in order for the temperature and pressure in hell to stay the same, the ratio of the mass of souls and volume needs to stay constant. Two options exist:

1. If hell is expanding at a slower rate than the rate at which souls enter hell, then the temperature and pressure in hell will increase until all hell breaks loose.
2. If hell is expanding at a rate faster than the increase of souls in hell, then the temperature and pressure will drop until hell freezes over.

So which is it? If we accept the quote given to me by Theresa Banyan during Freshman year, "that it will be a cold night in hell before I sleep with you" and take into account the fact that I still have NOT succeeded in having sexual relations with her, then Option 2 cannot be true... Thus, hell is exothermic."

Obligatory link ...

<http://csmres.jmu.edu/bioweb/bbb/hell.htm>

1) No known species of reindeer can fly. But there are 300,000 species of living organisms yet to be classified, and while most of these are insects and germs, this does not completely rule out flying reindeer only Santa has ever seen.

2) There are two billion children in the world. But since Santa doesn't appear to handle the Muslim, Hindu, Jewish, and Buddhist children. This reduces the workload down to 15% of the total-378 million according to the national population reference bureau. At an average rate of 3.5 children per household, that's 91.8 million homes. One presumes that there's at least one good child in each.

3) Santa has 31 hours of Christmas to work with, thanks to the different time zones and the rotation of the Earth, assuming he travels east to west (which seems logical). This works out to 822.6 visits per second. This is to say that for each Christian household with good children, Santa has 1/1000th of a second to park, hop out of the sleigh, jump down the chimney, fill the stockings, distribute the remaining presents under the tree, eat what ever snacks have been left, get back up the chimney, get back into the

sleigh, and move on to the next house. Assuming that each of these 91.8 million stops are evenly distributed around the earth (which, of course, we know to be false, but for the purposes of our calculations we will accept), we are now talking about .78 miles per household, a trip of 75.5 million miles, not counting stops to do what most of us have to do at least once every 31 hours, plus feeding and the like. This means that Santa's sleigh is moving at 650 miles per second, 3 000 times the speed of sound. For the purposes of comparison, the fastest manmade vehicle on earth, the Ulysses space probe, moves at a pokey 27.4 miles per second- a conventional reindeer can run, tops, 15 miles per hour.

4) The payload on the sleigh adds another interesting element. Assuming that each child gets nothing more than a medium sized Lego set (2 lbs.), the sleigh is carrying 321,000 tons, not counting Santa, who is invariably described as being overweight. On land, conventional reindeer can pull no more than 300 pounds. Even granting that "flying reindeer" could pull TEN TIMES the normal amount, we cannot do the job with eight, or even nine. We need 214,000 reindeer. This increases the payload-not even counting the weight of the sleigh- to 353,430 tons. Again for comparison- this is four times the weight of Bill Clinton's ego.

5) 353,000 tons travelling at 650 miles per second creates enormous air resistance- this will heat up the reindeer up in the same fashion as space crafts re-entering the earth's atmosphere. The lead pair of reindeer will absorb 14.3 Quintillion joules of energy per second EACH. In short, they will burst into flames almost instantaneously, exposing each of the reindeer behind them, and create deafening sonic booms in their wake. The entire reindeer team will be vaporized within 4.26 thousandths of a second. Santa, meanwhile, will be subjected to centrifugal forces 17,500.06 times greater than gravity. A 250-pound Santa (which seems ludicrously slim) would be pinned to the back of his sleigh by 43,155,015 pounds of force.

6) There is another factor which involves the specifications of the reindeer. Considering that the average roof of a house could hold perhaps 3 tons max, the 353 430 ton sleigh and reindeer would collapse the roof. As a guess, let's say that each of the reindeer are three yards long, the distance between them be two more yards, and the sleigh be ten yards long. If all of these were to be true, the entire reindeer team would be 611 miles long. Assuming the storage area for presents in the sleigh was ten yards by ten yards (which seems to be very big when compared to tradition images of Santa), the 378 million Lego sets (approximate dimensions: 8 inches, 6 inches, 3 inches) (that is, one present per child, without stocking stuffers) would take up a volume of 1,512,000,000 cubic yards. At this length, the sleigh would have to be made many miles long.