

FROM THE DESK OF  
**MATT LOWRY**

Stats: Date Built  $\rightarrow$  ~2600 BC ?  
Height  $\rightarrow$  146 m (480 ft)  
Side Length  $\rightarrow$  230 m (755 ft)  
# Blocks  $\rightarrow$  2.6 million  
Block size  $\rightarrow$  1 m<sup>3</sup>  
Block mass  $\rightarrow$  2600 kg  
= 5700 lbs  
(weight)



## Thoughts from... *Matt Lowry* Unidentified Random Thoughts

On the first day of the New Year an article was published in the Chicago Tribune about an event that took place at the Chicago O'Hare Airport late last year. According to observers, on the evening of Nov. 7 they saw what has been variously described as a "flying saucer-like object", like a "Frisbee", and that it "made no noise" as it seemingly hovered at roughly 1900 feet in altitude.

Further, witnesses claimed that the object was dark gray, anywhere from 6 to 24 feet in diameter, and hovered over the airport for several minutes before silently "bolting" up through the cloud deck.

So what was it? What was this mysterious object that so confused, frightened, and fascinated so many people?

One worker who saw the event stated, "I tend to be scientific by nature, and I don't understand why aliens would hover over a busy airport." Another stated that as a result they "experienced some religious issues". The media had a field day with the story during a slow news cycle in the opening days of 2007, and the general consensus was that the phenomenon was something otherworldly in origin. At least, that was the implication.

Meanwhile, other explanations include the possibility that it was some kind of freakish atmospheric phenomena, a secret military craft, or even a stray weather balloon. But for many people, the conclusion that it was none other than an alien spacecraft is just too tempting an idea to discount.

Why is it that so many people are all-too-willing to, on the basis of incomplete or scant evidence, draw the conclusion that such things are, by default, extra-terrestrial visitors from another planet?

To explore the flaws in such thinking, we must first revisit the definition of the term "UFO". A UFO is, by definition, an Unidentified Flying Object. This means that, quite simply, we do not know what it is - it doesn't mean that it's a bird, weather balloon, alien spacecraft, or even Santa Claus. It means that we lack enough information to state that we know what it is. Plain and simple.

But this area of uncertainty is where the alien spacecraft advocates insert their questionable logic. Usually, the

argument goes something like this: "Well, it couldn't be anything else but an alien ship!" Right?

Wrong. Such an erroneous argument is sometimes called the "argument from ignorance" or the "god-of-the-gaps", and it is a very common mistake in reasoning. Times too innumerable to count have shown us the errors of this form of reasoning. For example, we often see it employed in court cases when the main argument for trying a suspect for murder is not the preponderance of evidence showing they did kill in cold blood, but the too oft-repeated refrain: "It couldn't have been anyone else!"

In the past, strange & unexplained phenomena were often explained in explicitly religious terms via the "god-of-the-gaps". In humanity's ignorance, lightning was attributed to the moods of powerful deities such as Thor or Zeus, and other seemingly "miraculous" events were said to be the work of angels, demons, or God.

In modern times, what seems to have changed is not so much our faulty reasoning, but the bogeymen we tap in an attempt to explain our ignorance. Rather than explain what we don't know by making appeals to the blatantly supernatural (deities, angels, or leprechauns), more of us are using a new pseudo-religion of "UFOology" to explain the unknown as aliens in their ships with advanced technology. Perhaps when discussing UFOs, we should speak not of the "god-of-the-gaps" argument but "alien-of-the-gaps" instead.

In exploring the universe around us, it is important that we employ a healthy balance of wonder & skepticism. Perhaps there are intelligent aliens out there (I'd like to think so), but wanting it to be true doesn't make it so. Better to wait until there is solid evidence.

So what's the best response when confronted with something that we don't understand, such as a funny object in the night sky? In the absence of any definitive evidence, the best answer is simply to state the most obvious truth: "We don't know."

For some reason, those three words are very unsettling to many, but the acknowledgement of what we do not know is often the first step to attaining new knowledge.

And sometimes that's how the greatest discoveries are made.

Ad Astra - Matt Lowry

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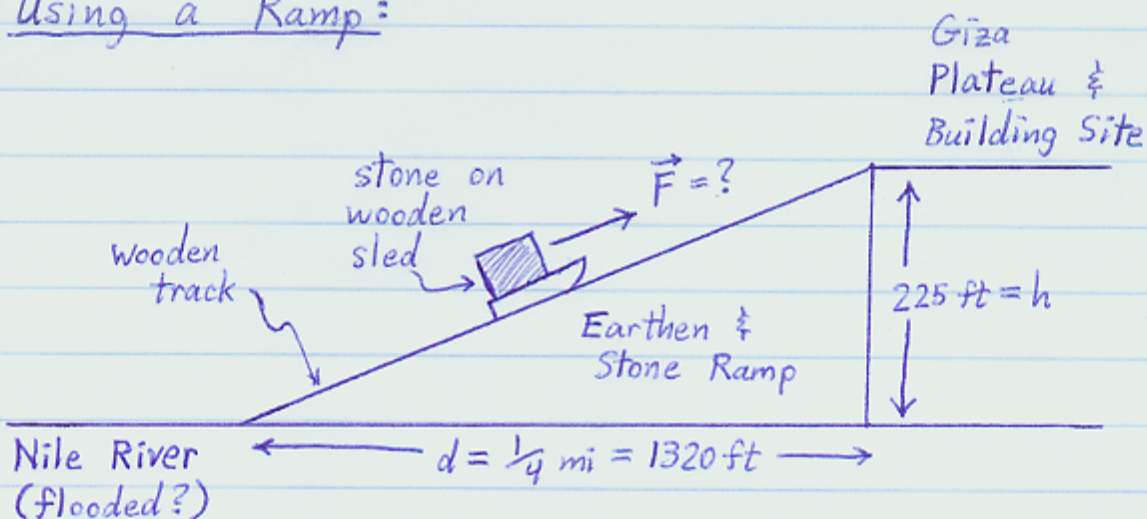
## **The History of Herodotus by Herodotus**

(Circa 440 BC)

“Till the death of Rhampsinitus, the priests said, Egypt was excellently governed, and flourished greatly; but after him Cheops (Khufu) succeeded to the throne, and plunged into all manner of wickedness. He closed the temples, and forbade Egyptians to offer sacrifice, compelling them instead to labor, one and all, in his service. Some were required to drag blocks of stone down to the Nile from quarries in the Arabian range of hills; others received the blocks after they had been conveyed in boats across the river, and drew them to the range of hills called the Libyan. A hundred thousand men labored constantly, and were relieved every three months by a fresh lot. It took ten years’ oppression of the people to make the causeway for the conveyance of the stones, a work not much inferior, in my judgement, to the pyramid itself. This causeway is five furlongs in length, and is covered with carvings of animals. To make it took ten years, as I said – or rather to make the causeway, the works on the mound where the pyramid stands, and the underground chambers, which Cheops intended as vaults for his own use: these last were built on a sort of island, surrounded by water introduced from the Nile by a canal. The pyramid itself was twenty years in building. It is a square, eight hundred feet each way, and the height the same, built entirely of polished stone, fitted together with utmost care. The stones of which it is composed are none of them less than thirty feet in length.

The pyramid was built in steps, battlement-wise, as it is called, or, according to others, altar-wise. After laying the stones for the base, they raised the remaining stones to their places by means of machines formed of short wooden planks. The first machine raised them from the ground to the top of the first step. On this there was another machine, which received the stone upon its arrival, and conveyed it to the second step, whence a third machine advanced it still higher. Either they had as many machines as there were steps in the pyramid, or possibly they had but a single machine, which, being easily moved, was transferred from tier to tier as the stone rose – both accounts are given, and therefore I mention both. The upper portion of the pyramid was finished first, then the middle, and finally the part which was lowest and nearest the ground...”

## \* Using a Ramp:



- How much force is required to get the 2.5 ton ( $\sim 5000 \text{ lbs}$ ) stone block from the Nile to the Giza Plateau?

Assumptions: i) wooden track & sled are lubricated so neglect friction (for now)  
 ii) a team of eight men pull the block

$$d_{\text{ramp}} = \sqrt{d^2 + h^2} \cong 1340 \text{ ft}$$

$$W = \vec{F} \cdot \vec{d}_{\text{ramp}} \Rightarrow F = \frac{W}{d_{\text{ramp}}} = \frac{(mg)h}{d_{\text{ramp}}} \begin{cases} \text{where } mg = 5000 \text{ lbs} \\ h = 225 \text{ ft} \\ d_{\text{ramp}} = 1340 \text{ ft} \end{cases}$$

Thus:  $F = 840 \text{ lbs}$  of total force or

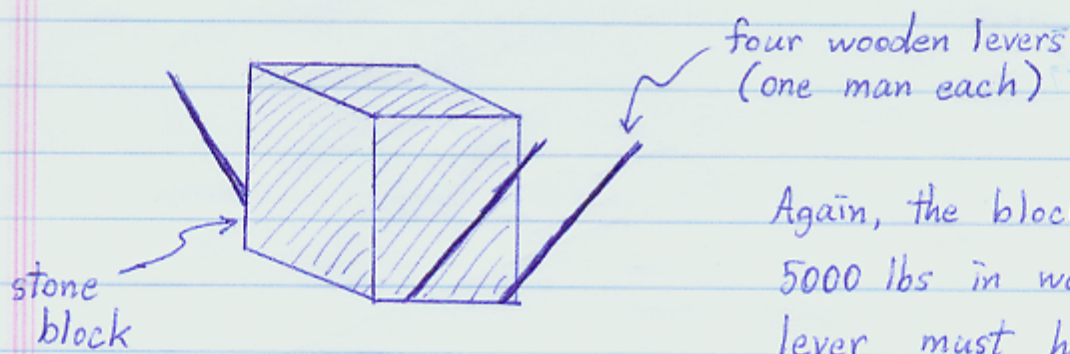
$$F_{\text{man}} = 105 \text{ lbs of force per man}$$

- Of course we know friction isn't negligible, so let's add a "friction fudge-factor" of +100 lbs...

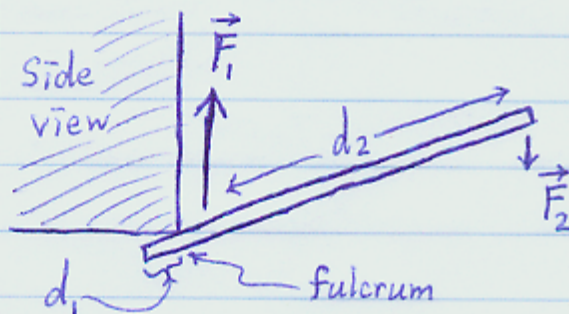
$$\therefore \boxed{F_{\text{man}} \cong 205 \text{ lbs}}$$

It is perfectly feasible that an able-bodied man could generate this much force.

## \* Herodotus' Machine :



Again, the block is roughly 5000 lbs in weight, so each lever must handle  $\sim 1250$  lbs.



- Assumptions :
- i)  $F_1 = 1250$  lbs
  - ii)  $d_1 = 6$  in =  $\frac{1}{2}$  ft
  - iii)  $d_2 = 8$  ft
  - iv) levers are 100% efficient

Simple Machine Formula :  $F_1 d_1 = F_2 d_2$

$\rightarrow$  input force  $F_2 = F_1 \left( \frac{d_1}{d_2} \right) = (1250 \text{ lbs}) \left( \frac{0.5}{8} \right)$

$$\therefore \boxed{F_2 = 78 \text{ lbs}}$$

Again, it is perfectly feasible that an able-bodied man could exert this much force.

For more information, see...

<http://www.geocities.com/Athens/Oracle/2451/pyramid/desk1.htm>