

## Re: Pyramid stone?

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- *From:* "Franz Gnaedinger" <[frgn@xxxxxxxxxxxx](mailto:frgn@xxxxxxxxxxxx)>
  - *Date:* 12 Jul 2005 23:19:39 -0700
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Philip Deitiker, in a flurry of fingers, shaped the electrons thus:

- > Just 60 tons?
- >
- > 2004 Queen Mary 2
- > Cunard Ltd.
- > 150,000 tonnes
- > 23 decks
- > length 1,132 feet (1/5th of a mile)
- > width 147.5 feet
- > top speed 30 knts.
- >
- > So essentially your argument is that we can build 150,000
- > tonne ships on the banks of muddy shores then drop them into
- > the drink, but moving a 60 ton stone 1/2500th that weight over
- > sand is impossible.
- >
- > The average home around here weighs about 60 tons and sits
- > on a soft gooey mud called gumbo. They only sink about 1/8th
- > inch per year.
- >
- > Sand is one of the better materials to build a road bed on as
- > long as there is no rain. you can get about 95% compaction
- > readily easily, for example, as one adds layers of sand get
- > someone with a sledge hammer to pack each layer, add water,
- > pack again, and so on. As one gets to the surface layers
- > increasingly sized sand and pebble can be added, filled with
- > sand an packed. when the road bed is about 2 feet or so over
- > initial grade the surface can be leveled by filling in with
- > decreasing sized sand grains and packed. One easy way to
- > increase the stability of the sand is to occasionally add
- > CaOH<sub>2</sub> and volcanic ash mixture to the sand that has been
- > packed. Other ways are to add stone aggregates and to pack the
- > sand around with water and packing devices. Lie down a layer
- > of flat stones about 1/2 meter square feet by 5 cm thick,
- > spacing them about 1/4 inch a part, file with number 2
- > sand/Number 4 sand mixture, cover evenly with minimum depth 2
- > mm of a number 4 grade sand. Stagger another layer of paving

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- > stones on top of that and fill with sand again. One can add a
- > topping layer of any mortar (CaOH<sub>2</sub> is fine) to lock the sand
- > in an protect it from rain. the sides of the ramp would need
- > to be protected by at least one layer of stone with mortar and
- > a water resistant topping coat (mortar and fine sand). The
- > surface can be sanded to make smooth.
- > On inclines the danger is that the top layer of stone will
- > shift, this is easy enough to deal with occasional wooden or
- > iron spikes into the road bed that brace surface stones. I
- > could imagine such a road bed could support trucks carrying
- > much more than 60 tonnes. The road bed will need occasional ma
- > One key notion of carry large weights is to spread the
- > weight out, for example 18 wheeled tanker trucks carrying
- > 10,000s of gallons of crude oil travel over gravel mud
- > aggregate roads even under wet conditions. One can spread the
- > weight out for dense objects by having a series of crossbeams
- > under it to move the weight in front and behind the object.
- >
- > If you want to go to expert level road beds of course you
- > can use crushed igneous rock, like crushed granites, these are
- > still found in some areas, like in the washes around granite
- > domes. These granite particles pack very quickly and have good
- > rigity after compaction, one does not need to add stone or
- > lime. In many areas in the hill country this has been used as
- > road bed and it lasts many years with occasional packing. Of
- > course this can be improved on by adding graded rocks such as
- > white marble, on top of which can be filled with calcium
- > carbonate, flattened and then placing whatever type of road
- > material. For interstate traffic now a days it is very common
- > that such durable beds are covered with a 1 to 2 inch layer of
- > asphalt topped with tar and then the standouts for the
- > reinforcement 2 about 9 cm off the ground, which is then
- > covered with 20 cm of concrete with no practical limit on how
- > much weight can be supported. However for international
- > airports the concrete poured from runways is considerably
- > thicker.
- >
- > We can consider the weight issue from that point of view. A
- > 747 has a Max take off weight of 362875kg (362 tonnes) and the
- > runway from which it takes off is supposed to be cabable of
- > supporting that weight in case of an emergency abort or
- > landing after takeoff, although theoretically the plane would
- > jettison at least 35% of its fuel (issues with the tail
- > section of the longer 747s and ground contact). Landing
- > trajectory is on a glide slope of 300 meters/ 5 kilometer and
- > the landing speed of the 747 at that weight is about 200 mph
- > (320 km/hr, 88 meter/second) therefore the wheels of the 747
- > would contact the runway at a verticle speed of about 5.28
- > meters per second, this decelerates to 0 within less than 1/4
- > a second, so or deceleration by about 3 g. This adds to the
- > weight of 1 g for the aircraft and so that the total g force

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- > on landing of about 4 g, this has to be multiplied by the
- > weight of the aircraft of about 300 tons make the initial
- > landing force on the runway about 1200 tons by weight. This is
- > factored into the thickness of the concrete used for the
- > runways. Consider the weight by tire and the surface area at
- > which the weight is transferred to.
- > There was a recent incident here at IAH in which a
- > Continental 737 30 minutes out lost its left engine, this
- > resulted in an aborted flight and return to departure airport.
- > By the time the aircraft had reached the runway the left
- > engine was on fire and we can assume that the vanes of the
- > turbine had been ground to bits. Therefore the right turbine
- > was producing most of the power, on landing planes use both
- > engine and thrust diverters to decelerate the aircraft, this
- > allows the pilot to adjust vertical speed to near zero before
- > hitting the runway since he can use both brakes and reverse
- > thrusters to decelerate. You cannot 'reverse' thrust with one
- > engine as the aircraft would spin off the runway. Therefore he
- > had to come down 'hard' and use the brakes, about half of the
- > tires had blown out by the time the plane had come to a full
- > stop, passengers report a number of bumps and bruises on the
- > landing.

Philip Deitiker discusses with me around corners. He filters me, and when someone quotes a sentence from a message of mine he replies to that single sentence, missing most of my argument, in this case the beauty of my ramp vs the eyesore of a rubble ramp.

If sand were such a stable ground, why get so many cars stuck in the Sahara? As for rubble: from wandering in the Swiss alps I know how instable rubble slopes can be. And a pyramid ramp is not meant for just pulling one single granite beam along, it served for some twenty years. Bumpiness of a ramp, inevitable with a rubble ramp, would multiply the amount of work, as the relatively small sleds can't even out the bumps. And such an instable ramp would increase the danger for the workers. If I were a pyramid builder, I would not allow a rubble ramp, because it is ugly, requires way too much material, gets bumpy, and increases the amount of work and the risk for my workers. Only a solid ramp can do, it makes the huge and slowly growing monument look dainty, a pleasure for the eye right from the begin and throughout the whole twenty or more years the building of such a monument requires. The volume of my ramp is only one seventh of the pyramid's volume. Later on the inner blocks serve for the casing, while the outer ones are reused for the temenos, the large temple at the eastern flank, mastabas, and so on. My ramps are solid, stable and save. Stability was a great concern to the Egyptians. For example the margins of the base of the former Abu Rawash

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pyramid are inclined by twelve degrees for stability.

Only problem is: the ramps I propose require a good deal of mathematics, for they completely cover the pyramid. Academe does not allow a mathematical knowledge to Ancient Egypt, and so they miss the only ramp that really does.

I say it again, the methods of the pyramid builders as designed by academe are plain kooky, and the illustrations in books often cheat the readers into believing that such a method could actually do, for example insanely steep ramps.

Everybody sees that these methods can't work, which is the reason for the many kooks in the pyramid business: the methods proposed by academe fail, building a pyramid involves a solid body of mathematics, them ejits of old knew no maths, ergo the pyramids were built by aliens ... The kooks outside academe are just mirroring and enlarging kookiness and prejudices inside academe. Warming up the old prejudices is inviting a new sweep of mega-kooks into sci.archaeology.

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- *Follow-Ups:*

- ◆ [Re: Pyramid stone?](#)

- ◆ *From:* rms

- *References:*

- ◆ [Re: Pyramid stone?](#)

- ◆ *From:* Franz Gnaedinger

- ◆ [Re: Pyramid stone?](#)

- ◆ *From:* kenney

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- ◆ *From:* Philip Deitiker

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