By Benjamin Lowhrke, Ploughshares Found, with comments by NPSGlobal, 3 Aug 2012.

The B61 life extension program gets a gold medal for setting records as the most expensive nuclear warhead in U.S. history. It also gets another ignominious recognition – costing more than its weight in solid gold.

The B61 bombs are the oldest bombs in the operational arsenal – first deployed in the 1960s. The Life Extension Program is intended to update and overhaul the warheads to keep them in the arsenal for decades to come, allowing the B61 to continue serving as the last remaining tactical nuclear warhead in the arsenal. The bombs remain deployed in Europe, despite broad recognition that they have no military utility.

Unfortunately, the life extension program (LEP) for the B-61 nuclear bomb is now projected to cost $10 billion. When we first heard that, some quipped that the bomb must be gold-plated. It's not. That would be too cheap.

B61 bombs weigh approximately 700 pounds each. At the prices near historic highs of $1,619 per ounce, 700 pounds in solid gold is worth only $16.5 million. [Updated]
How does the B-61 LEP measure up?

Each of the estimated 400 B61-12 nuclear bombs will now cost approximately $28 million, according to Hans Kristensen at the Federation of American Scientists (a Ploughshares Fund grantee). That is 1.5 times its weight in solid gold.

Let's put that in perspective. Each of the gold medals handed out at the London Olympic Games contains a minimum of 6 grams of gold. 700 pounds of gold is enough for 52,919 gold medals. That's five times the total number of Olympic athletes in London.

For a bomb that has no place in a 21st century military strategy, $10 billion might be too much to pay. Instead of extending the B61's life, wouldn't it make more sense to let it finish its golden years in the dismantlement queue?

This marks the perversion of the state military-industrial complex which is the only one able to develop weapons that have been tactically useless since 1945. This are weapons that no strategist could truly locate in his battle plans, being that conventional weapons as the "mother of all bombs" has the power of a W54 warhead (10 tons of TNT) and the "father of all bombs" is even four times more powerful. Conventional weapons have proven to be sufficient in Iraq, Afghanistan and Syria.

Beyond blast yield, conventional bombs are more efficient because they do not pollution, allowing an immediately economic recovery and the reconstruction in particular.

The original purpose of these weapons was to prevent a total war like WWII, which was never in the USSR's plans. Nuclear weapons were only a waste of more than U$S 5 trillion in USA since 1940 (until 1998 according to Brookings Institution), and the USSR spending is even higher. And on this account is not considered a loss by distraction of scientists who could develop more economically efficient inventions.
An astute reader pointed out that the B61-12 will actually cost $11.5 million more than its weight in gold. I underestimated it at $10 million more in the original blog.

I made the mistake of calculating gold costs in imperial ounces, where gold is actually traded in troy ounces. Correcting my conversion error shows that 700 lbs. of solid gold is actually worth $16.5 million at the time of the original post.

Special thanks to our reading for correcting me. This is a friendly reminder that, despite much progress reducing the number of nuclear weapons in the world, there has been much greater progress eradicating the imperial measurement system.