Mere bumps in the road . . .

Posted on August 11th, 2009 by earleholland

The news last week that the Large Hadron Collider, the massive particle accelerator deep underground at the European physics laboratory CERN, suffered another major setback seemed to garner a much milder response than some people might have expected.

Tunnel at the Large Hadron Collider

Officials running the huge device staged an impressive soiree early last fall for dignitaries and journalists to tout the near completion of what could be argued as one of the most complex construction projects of all time. And while all concerned understood that the event was mostly symbolic — that is, they weren't "starting" the actual physics work – it was important then to signify what had been accomplished and to increase the anticipation for when experiments actually began.

But then disaster struck in the vast 17-mile underground tunnel when an explosion killed power to some of the huge superconducting magnets meant to guide the subatomic particles, damaging electrical connections and halting work leading to the experiments. Instead, all attention turned to repairing the damage and rechecking equipment. Those inspections yielded other problems with wiring splices that could limit the effectiveness of the giant superconducting magnets.

The verdict: The start of actual scientific work is now postponed until this fall and even then, the apparatus will be run at only about half of its planned capacity for some time until the researchers are confident all the bugs are worked out of the machinery.

What's surprising about all this is not these unexpected delays and postponements, or even the stepping back from pushing the machinery to full power. Engineers and researchers alike will quickly point to the fact that massively complex projects like this will inevitably face delays and unexpected hurdles, and when they are encountered, caution and prudence is the only wise approach.

No, what's surprising is that there has been no loud outcry about delays and cost overruns on a project that's already taken 15 years and cost $9 billion. A look back at earlier big, expensive science projects almost always included loud voices when deadlines were missed and the price tags rose. The public, often fueled by politicians, complained over additional costs and seemingly unkept promises.

NAVIGATION

- Home
- About us
- Research Communications Staff

RECENT POSTS

- A graphic misrepresentation . . .
- Of ghoulies and ghosties and long-leggedy beasties . . .
- A cascade of lemmings . . .
- Not what Ben meant . . .
- Of science, baseball, and cricket . . .

SOCIAL MEDIA

- OSU Research News on the Web
- Research News on Facebook
- Research News on YouTube
- StumbleUpon

WHAT WE READ

- Dot Earth — Andrew Revkin/New York Times
- Framing Science
- Health News Review
- Knight Science Journalism Tracker
- Real Climate
- Science News
- Speaking of Research
- The Great Beyond
- The Panda's Thumb
- The Plainspoken Scientist
- TierneyLab
- WiredScience

RSS

CATEGORIES

- Climate change
- Environment
- Physics
- Researchers
- Science Communication
- Science policy
- Space
- Uncategorized

ARCHIVES

- February 2012
- January 2012
- October 2011
- September 2011
- August 2011
- July 2011
- May 2011
- April 2011
- March 2011
- December 2010
- October 2010
- September 2010
- August 2010
- July 2010
- June 2010
- May 2010
- April 2010
- March 2010
- February 2010
- January 2010
- December 2009
- November 2009
- October 2009
- September 2009
- August 2009
- July 2009
- June 2009
- May 2009

Consider the Hubble Space Telescope, for example.

Originally proposed to cost around $500-600 million, delays and construction problems forced a near tripling of that cost. When it was finally launched, the Hubble was seven years behind schedule and $1 billion over budget. And then came the problem with the instrument's blurred vision which required a Space Shuttle mission to replace components and correct its "eyesight." Add to that the cost of operating the Space Telescope Science Institute in Baltimore and several "servicing" missions to the Hubble by the Shuttle and the total costs for the project as of this year has been estimated at more than $10 billion.

Where is the outrage that we've come to expect over the unplanned cost of major science projects like the Hubble program?

Perhaps in the current economic situation, with a global recession and governmental bailouts reaching trillions of dollars, the idea of spending more tens of millions on the project seems small potatoes in comparison.

More likely, it simply vanished in the awe and fascination that came with the wonderous images of the universe that Hubble has produced. When looking at the now-famous image of the Pillars of Creation, where massive clouds of interstellar gas and dust form the birthplace of stars, how can one worry about the price?

The widely viewed Pillars of Creation image taken by the Hubble Space Telescope.

Hubble let us peer into the vastness of space, to see for the first time the far reaches of our universe and the magic of creation. In doing so, it humbled us somewhat, reminding that regardless of how serious our problems appear, we are but a speck in the cosmos.

The LHC should do likewise, peering into inner space and the vastness of the subatomic world, to seek out the most elemental building blocks making up all that we know and all that we are. And if it costs a bit more money and time, I, for one, am patient, anticipating the as-yet-unseen Hubble-like wonders it should bring.__*Earle Holland*

Tags: Physics, Researchers, Science policy, Space // 3 Comments »

3 Responses to "Mere bumps in the road . . ."

Dadony // Aug 13, 2009 at 6:18 pm

April 2009
March 2009
February 2009
January 2009
December 2008
November 2008
October 2008
September 2008
August 2008
July 2008
June 2008
May 2008

META

Log in
Entries RSS
Comments RSS
WordPress.org

RESEARCH NEWS WEBSITE

Wooow, now I know what i don't know about this

Mackeran // Aug 19, 2009 at 11:58 am

Very interesting and amusing subject. I read with great pleasure.

Pittsburgh Patent Lawyer // Sep 2, 2009 at 11:07 pm

It is also possible that the public is not as excited about peering "into inner space" but I am personally excited to see what the largest particle accelerator in the world will tell us!

Discussion Area - Leave a Comment

Name (required)

Mail (will not be published) (required)

Website

Submit Comment

« Sympathy ill-placed . . . Of packrats and horseshoe crabs . . . »