



COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Lamar Smith, Chairman

For Immediate Release
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Statement by Chairman Lamar Smith (R-Texas)

James Webb Space Telescope: Program Breach and its Implications

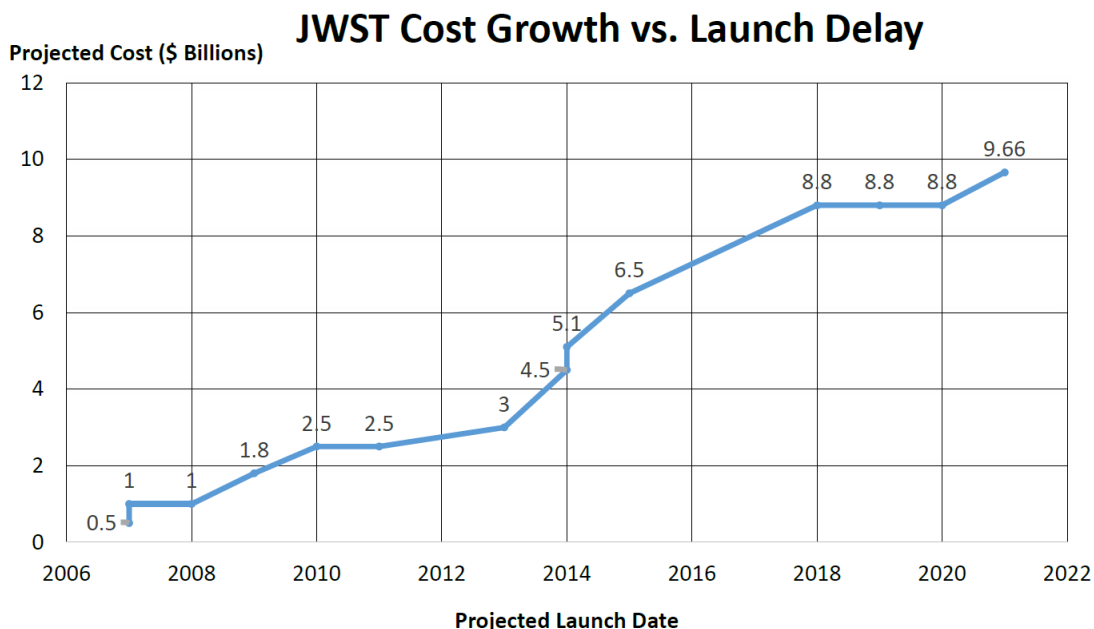
Chairman Smith: Today, we will hear from Administrator Bridenstine on NASA's plans to ensure that the James Webb Space Telescope (JWST) is a success. We will also hear from Tom Young on the findings and recommendations of the JWST Independent Review Board (IRB).

Tomorrow, at the second part of the hearing, Northrop Grumman's CEO, Mr. Wes Bush, will testify. We will learn more about why Northrop failed to deliver JWST on budget and on schedule and what can be done about it.

Welcome to Jim Bridenstine who is testifying for the first time since leaving the committee to become the NASA Administrator. He began his job with our high expectations, and he has already exceeded them. We can be confident that he is striving to tackle the program management issues NASA faces, specifically those associated with the James Webb Space Telescope.

Starting on March 26, 2018, NASA began notifying this committee about the JWST cost and schedule breaches.

Now that the IRB has completed its work, we should review the decades-long JWST cost overruns and schedule delays. Take a look at the chart on display.]



This chart chronicles JWST's substantial cost growth and launch schedule delays starting with the 1996 initial projections in the lower-left corner all the way to the IRB's 2018 projection in the upper-right corner.

It is truly staggering to behold how this space telescope's cost and schedule projections went from costing the same as a Space Shuttle mission—around half a billion dollars with an original launch goal in 2007—to now becoming an expenditure exceeding \$9 billion with a new launch goal in March 2021. That is nineteen times the original cost and a delay of fourteen years. It's hard to get much worse than that.

The cost of delaying the launch again will add almost another billion dollars to the total program cost. The \$8 billion development cost cap set in 2012 will be exceeded by \$803 million. With other program costs added in, the IRB now estimates the total cost at \$9.6 billion.

The IRB also stated that technical complications and unclear reporting roles, responsibilities, and lines of communications greatly impacted the development schedule and its associated cost increases. Mr. Young will provide details during his testimony.

We will discuss options going forward, such as the contractor watch list designation contained in the bipartisan NASA Authorization Act of 2018.

I support the continuation of JWST to mission completion and appreciate Administrator Bridenstine's efforts to improve contractor performance.

Going forward, Congress needs to have the necessary confidence in NASA's contractors to put us on the right path at a reasonable cost. Anything short of that will undermine congressional confidence in contractors' ability to deliver on their promises.

Usually, when government contractors make mistakes, no one is held accountable. The mistakes "just happened" or "were unavoidable" or "won't happen again." But in every case, the American people pick up the bill. We often forget there is no such thing as federal dollars. It's the American taxpayers' hard-earned money.

If space exploration is going to continue to earn the public's support, then contractors will have to deliver on time and on budget. If they cannot, they should be penalized.

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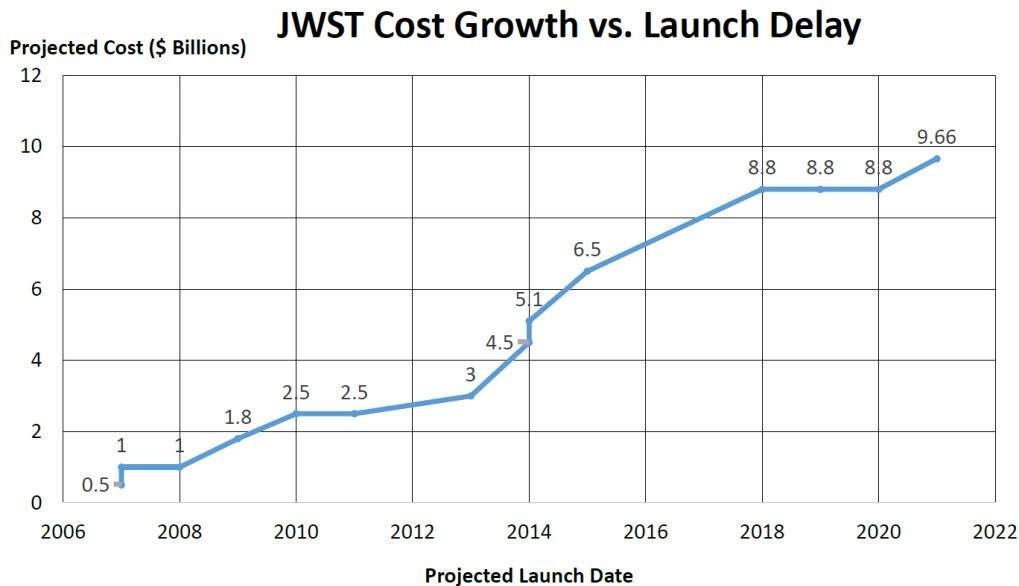
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Statement by Chairman Smith (R-Texas)

James Webb Space Telescope: Program Breach and its Implications

Chairman Smith: Yesterday, the Committee heard discussions about the James Webb Space Telescope (JWST) program breaches. NASA Administrator Jim Bridenstine and Independent Review Board (IRB) Chairman Tom Young provided insights into the Northrop Grumman management problems.

As a reminder of JWST's cost overruns and schedule delays, take a look at the chart on display.



This chart chronicles JWST's substantial cost growth and launch schedule delays starting in the lower-left corner with the 1996 initial projection of 500 million dollars and a 2007 launch all the way to the upper-right corner with the IRB's 2018 projection of 9.66 billion dollars and a 2021 launch. That is nineteen times the original cost and a delay of fourteen years. Who is going to be held accountable?

Beginning with TRW's 1990's developmental work on JWST through Northrop Grumman's acquisition of TRW and continuance of the project's development, it is clear that Northrop Grumman did not adhere to good business practices.

Digging into the details, the IRB report describes mistakes that have greatly impacted the JWST development schedule and its associated cost increases. The IRB categorized those issues as follows:

- First of a kind developments such as the complex sunshield for the telescope.
- Avoidable human errors in the workplace, such as the use of a wrong solvent and applying excess voltage.
- Lack of individual and organizational discipline in developing safety checks to catch human errors and minimize their impact.
- Embedded problems with contractor quality control processes, such as not detecting technician and material errors until assembly and testing when those errors added to costs.
- Lack of a contractor managed engineering audit process to catch embedded problems before those problems continued unchecked until testing and assembly.

The IRB's description of workplace errors and lack of good management has been found at other space missions associated with Northrop Grumman.

The US aerospace industry has the highest skilled workforce in the world. Their scientists, engineers, and technicians have built incredibly challenging and complex aerospace systems. So the workplace errors and lack of discipline, auditing, and quality control described by the IRB could lead us to believe that the real issue is with Northrop Grumman.

Not that Northrop Grumman hasn't tried to convince the public that all is going well. As this hearing date approached, Northrop Grumman's JWST advertising campaign loudly proclaimed, "Making History Requires Mission Success" and "The Value of Performance."

But the full-page ad in the Washington Post, which may have cost as much as 200 thousand dollars, didn't mention the lack of performance due to billions of dollars in cost overruns, years of launch delays, frustration of NASA managers, and avoidable workplace errors.

As I said yesterday, when government contractors make mistakes, typically no one is held accountable. The mistakes "just happened" or "were unavoidable" or "won't happen again." But in every case, the American people pick up the bill. We often forget there is no such thing as federal dollars. It's the American taxpayers' hard-earned money.

Going forward, Congress needs to have the necessary confidence in NASA's contractors to put us on the right path at a reasonable cost. Anything short of that will undermine congressional confidence in contractors' ability to deliver on their promises. Another adverse effect of cost overruns is that they can jeopardize other space programs.

If space exploration is going to continue to earn the public's support, then contractors will have to deliver on time and on budget. If they cannot, they should be penalized.

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