

Re: Bush cancels Hubble telescope rescue mission

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From: George William Herbert (gherbert_at_retro.com)

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Eric Chomko <echomko_at_polaris.umuc.edu> wrote:
>George William Herbert (gherbert@retro.com) wrote:
>: Eric Chomko <echomko_at_polaris.umuc.edu> wrote:
>: >George William Herbert (gherbert@retro.com) wrote:
>: >: Eric Chomko <echomko_at_polaris.umuc.edu> wrote:
>: >: >You wouldn't KNOW!
>: >
>: >: There's no evidence of it. JWST is still planned to be operated by
>: >: STSI as far as I know, and GSFC's involvement is still key.
>: >
>: >But to hav a period where we have no ST makes no sense.
>
>: Why?
>
>Because the current demand for use outweighs its use. It is not like it
>isn't used.

The current "demand" of every major telescope outweighs its use.

Because the users aren't paying for it.

>: We have no other spectrum in which an orbital observatory
>: has had continuous operations. It's not like we don't have
>: plenty of ground based telescopes.
>
>But none compete with Hubble.

This is just grossly ignorant, Eric. The light gathering capability of *many* ground based telescopes far exceeds that of Hubble. Keck I and II individually far exceed Hubble's light gathering.

Hubble brings a high resolution UV capability that you can't do from the ground, and a undistorted resolution that is slightly superior to ground based telescopes. It also can do much longer exposures than ground based telescopes can

do at the moment, somewhat balanced by its inferior light gathering area.

Extremely large ground based telescopes now in the design stages, such as Europe's OWL telescope (www.eso.org/projects/owl/) should be superior to Hubble in almost every way except UV spectrum capabilities.

>Here, you tell me why ISS is more important than Hubble?

>

>: *If there's some requirement for a truly permanent continuous*

>: *orbital telescope visible spectrum coverage, then that*

>: *requirement has never been articulated clearly to the*

>: *science planners. It has ever been clearly articulated*

>: *to the public, or congress.*

>

>You make it seem we haven't been using it!

No, Eric. We are clearly using it.

The astronomical community was not promised that Hubble or a successor in the visible spectrum would remain in continuous operation forever. There has never been a plan or program office whose job it was to provide a continuous perpetual availability of orbital optical astronomy platforms.

All the great observatories had expected lifespans, in some cases very short ones. As have their followons. There has never been a plan to have continuous IR coverage in space, or gamma ray or x-ray. Or visible.

If there had been a guarantee of continuous coverage, NGST / Webb Telescope would have been done as a less ambitious project intended to fly within Hubble's initially designed lifespan. That was rather explicitly not the planning decision made by the Astronomical community. JWST was pushed out in order to get its capabilities as high as possible.

>: *The current program has never *planned* to have truly*

>: *continous permanent orbital telescope visible spectrum*

>: *coverage.*

>

>: *People demanding that Hubble be kept going are asking*

>: *for something over and above what has been promised*

>: *in the past.*

>

>So, Is it broken? No. What does it need? Regular PM. Who are we to

>kill it if it still is of great service?

If its regular PM was not a Big Deal, then we would not be having this conversation, Eric. But there's no Jiffy Lube Gyro Shop in Hubble's orbital plane.

>: >: *There was no pre-Columbia change in the Hubble plans or NGST plans.*

>: >

>: >*Hubble was to have a repair mission soon as I recall.*

>

>: *Ok, you're arguing in the parent thread that NASA is*

>: *shifting resources to JSC away from "other useful things"*

>: *like Hubble.*

>

>: *Why did the Hubble repair mission go away?*

>

>*Because the current administration feels that all 27 shuttle missions must go to ISS.*

>

>: *Where did the money the Hubble repair mission was going to*

>: *spend go?*

>

>*To ISS, as I understand it.*

That is not correct. It's gone to Return to Flight, the new general purpose Shuttle bucket.

>: *The mission went away because Shuttle is now considered*

>: *brittle, and the money did not go to KSC, it went into*

>: *NASA general planning fund, and probably has ended up*

>: *with Return to Flight or Exploration Systems destinations.*

>

>*You act like it isn't clear that Hubble is GSFC and ISS is JSC. C'mon,*

>*don't pretend to be naive on this issue.*

ISS isn't getting more funding, Eric. ISS's capabilities and funding have been frozen for some time now.

What's eating money is Shuttle Return to Flight, which is required to do any Shuttle missions at all.

>: *The Congressional committees didn't cause Columbia to burn up.*

>

>*Right, but why should ISS get all the benefit and HST get squat?*

Because ISS happens to be the destination they can go to and, if they broke the Shuttle on ascent, park the Shuttle and have the crew survive on ISS until a rescue flight can come up and get them down.

If we had an equivalent safe haven in Hubble's orbit, or ISS had been built in Hubble's orbital plane, there would be no argument that there's no additional risk for the Hubble mission, and the actual flight cost

of the Hubble mission would have been acceptable, and the incremental flight risk would have been acceptable.

But post-Columbia, NASA leadership are being extra cautious about Shuttle operations. Hubble does not possess one mission safety requirement which they have imposed on ongoing flight operations.

- >: *The Congressional committees didn't establish the new flight*
- >: *safety guidelines.*
- >
- >*No, the allocated the funds.*
- >
- >: *The Congressional committees didn't do the engineering that*
- >: *estimated that it will take a billion dollars in new money*
- >: *to fly the robotic servicing mission.*
- >
- >*Right.*
- >
- >: >: *As I indicated earlier in thread, the only big winners from*
- >: >: *the Exploration Initiative to date are HQ.*
- >: >
- >: >*But all centers that support manned spaceflight will get preference, IMO.*
- >
- >: *Preference for WHAT?*
- >
- >*Exclusive use of the shuttle. ISS!*
- >
- >: *All centers that support manned spaceflight are getting nada*
- >: *right now. All the money's at HQ and Steidle isn't sending it*
- >: *to the centers, Eric.*
- >
- >*When we return to flight all that will change and you know it!*

What, Exploration's budget is going to get taken away and given to JSC for Shuttle and ISS?

That's absurd.

- >: *Follow the money. Steidle is not playing the usual NASA*
- >: *center funding game. He's building a small, from what I have*
- >: *personally seen very innovative (for NASA) new team at HQ and*
- >: *doing widespread outreach to find many alternative ideas on*
- >: *how to get things done. Some of these are publically released*
- >: *Exploration aquisition and research programs, some are private*
- >: *initiatives which they're doing behind the scenes to try and*
- >: *see how things can get better and cheaper.*
- >
- >: *But, and I would really appreciate it you'd LISTEN this time,*
- >: *THEY ARE NOT SENDING THE MONEY TO THE CENTERS.*

>

>*No, they are simply focusing on which projects they favor, and THAT has indirect affect on who gets money.*

>

>*If and when Hubble gets decommissioned, where do you think the funds saved will go? If you don't think ISS, the you're being disingenuous.*
>*And the indirect reallocation is through the shuttle.*

What funds will be saved decommissioning Hubble? STScI is a very low cost facility.

ISS isn't getting any more components. The production line is shut down and the workers are gone.

Shuttle isn't getting any more upgrades than Return to Flight requires now.

>: *Your idea of what's been happening with Exploration Systems*

>: *funds is simply wrong. I've been trying to tell you all week.*

>

>*And I'm trying to tell you that you see it from the other side while*

>*thinking you view it from a neutral place. It goes back to making up*

>*your mind on things without taking a truly empathetic point-of-view. We*

>*have been around with this before!*

>

>: *You don't appear to believe that it's possible for them to*

>: *be doing business differently. Please, if you don't believe*

>: *my relaying of the information, then go do your own research*

>: *and see what OExS has been doing for the last year.*

>: *It's all public info.*

>

>*Look 27 shuttles and none are available to service Hubble? No, I;m not*

>*buying it!*

>

>: *Repeat after me!*

>: *THEY ARE NOT SENDING THE MONEY TO THE CENTERS.*

>: *Say it again!*

>: *THEY ARE NOT SENDING THE MONEY TO THE CENTERS.*

>: *Hallelujah! Say it again!*

>: *THEY ARE NOT SENDING THE MONEY TO THE CENTERS.*

>: *One more time!*

>: *THEY ARE NOT SENDING THE MONEY TO THE CENTERS.*

>: *Reform be blessed!*

>

>*I know that! It is based upon programs. Those programs are susceptible to*

>*favor and who is in power. ISS is popular and HST isn't. The planned usage*

>*of the shuttle has made that clear.*

Please repeat after me:

The ISS production facilities are shut down.

The Shuttle upgrades other than Return to Flight are

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terminated and their workers are gone.

You can't hold any sort of reasonable opinion on this if you won't research and see what programs have been shut down and where the money really has gone, Eric.

You and Greg are living in 2002 land. It's not 2002 anymore, and the structural differences in how NASA is doing things are immense. If you can't be bothered to look and see what's changed and how significant that is, then you're rendering yourself irrelevant.

The changes have happened, and if you blind yourself to them you know nothing. You keep assuming that programs which don't exist anymore will benefit from problems and funding shifts in the future. ISS production is dead and gone. Shuttle long term upgrades are dead and gone.

Stop living in fantasyland. They can't eat your budget when they're dead programs.

–george william herbert
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