

Re: Why wasn't escape tower used on Gemini?

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Dale wrote:

At the beginning of the program, if the parawing hadn't been envisioned yet, were the parachutes to be in the nose of the craft?

Yes, the parachutes were always going to be in the nose, which is where the inflatable parawing would have been stowed also.

The layout was envisioned as an enlarged and improved Mercury, and was called "Big Mercury" before being the name Gemini was chosen.

Here's a photo of a Gemini mock-up showing the nose gear:

http://www.spaceinminiature.com/ref/gem/gem_img/nose_stowed.JPEG

And retracted main skid gear: <http://www.ninfinger.org/~sven/models/gemini//parfl01.jpg>

We think the green thing that looks like a car air cleaner has something to do with the capsule's atmosphere system.

Does anybody know what they did with the skid gear bays on the finished Gemini? Were they deleted, or used for some other purpose?

If so, how far along did the design get before the change? Was there any "fallout" from that?

Although they had hoped the parawing system for the convenience of allowing it to land at Edwards AFB, they realized that they could have trouble with it, so designed the spacecraft in such a way that they could also use parachutes if the Rogallo didn't pan out. Having it land on its side in the ocean meant you could open the hatches with worrying about flooding the spacecraft after splashdown in calm seas. If they had gone with the heatshield-first landing you would have had to hope the spacecraft would roll onto its side after landing, as the hatches went nearly all the way to the heatshield, and opening them would have immediately flooded the capsule, so you'd be stuck in it till the Navy hoisted it on board a ship, or flipped it on its side.

Mercury had a secondary hatch at it's apex for the astronaut to use in an emergency if the capsule landed off course with no naval support in sight, like happened to Carpenter. I don't know if Gemini had some sort of similar hatch in case the capsule didn't swing over the the horizontal position for landing, as it started its

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descent under its parachute in a vertical mode, then rotated to the horizontal as it neared the water.

One thing about the Rogallo wing – in an emergency ground landing off–course, it would certainly not have been as safe as the parachute; gliding into a rain forest at high speed wouldn't have been fun, so I assume that's a situation where you use the ejection seats after jettisoning the wing so as not to hit it on the way out.

Here some paintings of the Gemini landing under the Rogallo wing:

http://www.spaceinminiature.com/ref/gem/gem_img/regallo_side.JPEG

http://www.spaceinminiature.com/ref/gem/gem_img/regallo_ldg.JPEG

You can see this is pretty early in the program by the fact that the Gemini is painted white, which was how the first mock–up was painted.

Here's another completely off–the–wall way of landing a Gemini:

<http://www.astronautix.com/craft/winemini.htm>

Does it look a bit familiar?

Here's why:

<http://www.cloudster.com/Sets&Vehicles/ApesShip/Sci–Fi&FantasyModels38/PofAsciiFi&FantasyModels.html>

Sorry if these are dumb questions...

No question is dumb if it is spoken. ;–)

Pat

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