



Web Posted: 12/27/2008 12:00 CST

Brooks centrifuge slated for new use

By Sig Christenson - Express-News

The 2005 base-closure commission ordered that Brooks City-Base's historic centrifuge be dismantled and moved to Ohio, but after going around and around on the matter, the Air Force decided to leave it here.

Now, the agency running City-Base is mapping big plans to market the centrifuge, which has trained NASA astronauts going back to the 1960s-era Gemini program, as the hub for a young space-tourist industry fueled by the rich and famous.

"It's an emerging industry. That is exactly what we're looking at," said Donald Jakeway, CEO of the Brooks Development Authority. "That's where it is, in the beginning, but like anything else over time you may not need to be a millionaire or billionaire to do that."

BDA owns and operates City-Base, a 1,246-acre property that was conveyed to the city under a landmark federal law. It is developing a plan that would make City-Base the nation's first civilian center for aerospace training and medical testing. Its centrifuge is one of just two in the Air Force inventory, the older and the only one capable of testing people and equipment.

Civilians flying to the International Space Station train in Russia's Star City. Jakeway believes the Brooks' complex could draw interest as the only one available to private companies, especially those looking to develop aircraft that will someday fly people in space from a runway.

Jakeway said there are about 20 different companies in the aerospace industry studying ways of getting people into space. Training and medical testing are crucial for civilians hoping to fly, he added, yet it simply doesn't exist here.

"As I understand, there are facilities but no facility like this, and certainly no centrifuge," Jakeway said. "There's companies around the world who want to know what we're going to do with the centrifuge when we get it. What's really great is not just the centrifuge, it's all the other medical offices and research facilities and all the things that come with the centrifuges that would be attractive in the market place."

While BDA hopes to use the centrifuge and supporting offices as a space tourist magnet, there's a catch. The centrifuge is run by the Air Force, and it will be needed for pilot training long after 2011 — when the closure round ends.

The Air Force said it decided last year to leave the centrifuge here and build a new one at Wright-Patterson AFB near Dayton. Dismantling a device that included metal welds and motors embedded in concrete, plus the centrifuge's age and the irreplaceable nature of some of the parts, played a role in the decision, the Air Force said, adding that the manufacturer has gone out of business.

If the Air Force moved pieces of the centrifuge to Wright-Patterson without incident, it said, "There was little assurance that we would be able to successfully reassemble them and revalidate the integrity of the device such that it would be safe enough for human occupancy."

Jakeway's problem is that the Wright-Patterson centrifuge probably won't be ready until 2016. He wants an agreement with the Air Force that gives it top priority for use of the centrifuge while allowing the authority to rent it out to private individuals and firms well before another eight years pass.

“Some people may not want to wait that long, so the success of our strategic planning is based on when we would have the ability to ... do all the things we'd like to do,” said Jakeway, who calls private use of the centrifuge a “wonderful opportunity” for the authority.

Centrifuges spin, and G forces increase as they speed up. They've long been used to test how humans and equipment react under the stress of gravity and high-speed maneuvers.

The Brooks centrifuge recorded a human tolerance record of 9 Gs for 45 seconds in 1971. That discovery helped show that Air Force pilots could safely fly F-15 and F-16 fighters then in development.

Though the centrifuge didn't exist when the seven Mercury astronauts visited San Antonio for tests in the 1950s, the first of their group to orbit the earth returned here in 1998 to train for a shuttle mission. Wearing a bright orange pressure suit, John Glenn, then 76, pulled three Gs, tripling his weight — 168 pounds. The 17-minute test simulated a liftoff.

Jakeway's plan to reach for the stars was born in the demise of Brooks' storied aerospace mission, one that goes back to the first days of the space program in the 1950s. The 2005 Defense Base Closure and Realignment Commission ordered the centrifuge relocated to Wright-Patterson, but the Air Force opted to leave it here along with two chambers that simulate high-altitude flight.

The Air Force said its new centrifuge, whose cost isn't yet known, would be more capable than the older one here. It will fund the new centrifuge in part with \$35 million allocated by BRAC for moving the one at Brooks to Wright-Patterson.

In shuttering Brooks, BRAC ordered the relocation of 2,297 military and civilian workers with salaries averaging \$63,986 a year. It is the second Air Force base in the Alamo City to close in the past decade, and local leaders have expressed concern over the potential loss of such an educated work force.

Former Mayor Howard Peak, who left as head of the BDA board more than a year ago, wasn't aware of the plan and offered a guarded response when asked if the idea of marketing the centrifuge to space tourists was realistic or a little fantastic.

“I would say that's probably a nice part of what could be done at Brooks. But I would hope that there would be more activity than just that,” he said.

San Antonio businessman Bob Sanchez noted that Brooks' hyperbaric chambers would remain on the base as well, and that they could be used with a local hospital for diabetes treatment as well as for training.

“I think it's realistic,” said Sanchez, chairman of Frontline Systems Inc. and former head of Peak's original Brooks Task Force, which helped craft the concept that led to City-Base. “If you look at the training aspects of it, it does fit in with that.”

Find this article at:

http://www.mysanantonio.com/news/local_news/Brooks_centrifuge_slated_for_new_use.html