

GPS satellites not 'falling out of the sky': Air Force

May 21 2009, by Chris Lefkow



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A possible disruption in GPS service, relied upon by the US military as well as millions of drivers around the world as a navigation device, was raised in a recent report by the Government Accountability Office (GAO).

The GAO, the investigative arm of the US Congress, expressed concern

that GPS could be interrupted because of delays in modernizing and deploying the constellation of Air Force satellites which provides the service.

"It is uncertain whether the Air Force will be able to acquire new satellites in time to maintain current GPS service without interruption," the GAO report said.

"If not, some military operations and some civilian users could be adversely affected," it warned.

There are currently 31 active GPS satellites orbiting 12,600 miles (20,200 kilometers) above the Earth and at least 24 operational satellites are needed to provide optimal accuracy in calculating a user's position.

The United States plans to invest over 5.8 billion dollars in GPS space- and ground-based systems through 2013 but the GAO expressed concern that "over the next several years many of the older satellites in the constellation will reach the end of their operational life faster than they will be replenished."

The GAO said that if the Air Force, which plans to launch a new satellite in August and another in early 2010, did not meet its schedule, GPS service could be affected as early as next year.

"Such a gap in capability could have wide-ranging impacts on all GPS users, though there are measures the Air Force and others can take to plan for and minimize these impacts," it said.

The GAO report prompted the Air Force Space Command to reassure the public on Wednesday that the system is not in danger of failing.

In keeping with its high-tech mission, Colonel Dave Buckman, a

spokesman for Air Force Space Command, which is based at Peterson Air Force Base in Colorado, took to micro-blogging service Twitter to allay any fears.

"No, GPS will not go down," Buckman said in a Twitter message. "GPS isn't falling out of the sky."

Buckman did echo the GAO's concerns of a "potential risk associated with a degradation in GPS performance" but said "we have plans to mitigate risk and prevent a gap in coverage."

"We have 30+ satellites on orbit now. We'll launch another in Aug 09, and again early 10. Going below 24 won't happen," he said.

GPS has a myriad of uses besides just helping drivers get from Point A to Point B with real-time personal navigation devices affixed to the dashboard of their cars.

Most smartphones today come equipped with GPS, allowing a user to map his precise location at any moment, and it is widely used by the maritime and aviation industries, mass transit systems, communications networks and even electrical power grids.

Besides civilian applications, the US military uses encrypted GPS signals for troop movements, logistics, communications and search and rescue.

It also uses GPS to direct "smart" bombs and missiles and the GAO report warned that decreased performance could have an impact on military strikes.

"The accuracy of precision-guided munitions that rely upon GPS to strike their targets could decrease," the GAO said. "The risks of collateral damage could also increase."

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