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Frequently Asked Questions About Selective Availability

(Updated October 2001)

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At what time was SA turned off?

Selective Availability ended a few minutes past midnight EDT after the end of May 1, 2000. The change occurred simultaneously across the entire satellite constellation.

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Will SA ever be turned back on?

The United States has no intent to ever use SA again. To ensure that potential adversaries do not use GPS, the military is dedicated to the development and deployment of regional denial capabilities in lieu of global degradation.

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Do I need to replace my receiver to get the higher accuracy?

No. Existing GPS receivers around the world should be getting the higher accuracy right now without any modifications.

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With SA gone, do I still need differential GPS (DGPS)?

It depends on your specific user requirements. If you are using GPS for safety-critical navigation, you will still need to use the Coast Guard DGPS or Nationwide DGPS to get the higher accuracy (1-3 meter) and the integrity monitoring/warning service. If you are a

surveyor requiring sub-meter positioning, you will still need some form of DGPS to achieve that level of precision.

On the other hand, if you are a trucking company using GPS to track and manage assets, the < 20 meter accuracy now available from the basic civil signal may be sufficient to meet your needs without DGPS augmentations.

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Will the Coast Guard continue to operate its DGPS services?

Yes. The U.S. Coast Guard will continue to run the maritime DGPS network to provide the higher accuracy and integrity monitoring/warning service required for safety-critical navigation. In fact, efforts are currently under way to expand the Coast Guard DGPS network across the continental United States to provide the same GPS augmentation service to terrestrial users on railroads and highways. The expanded network is known as the Nationwide DGPS, or NDGPS, service.

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Is DGPS more accurate now?

No. There should not be much change in the accuracy of DGPS. However, DGPS corrections may not need to be broadcast as frequently any more. As a result, we may see future commercial DGPS services that use less radio bandwidth and thus cost less to the end user.

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I heard that SA will be left on in certain parts of the world. Is it still on in my country?

No. You have been misinformed. Selective Availability was a global degradation of the GPS service. It could not be applied on a regional basis. By turning it off, the President immediately improved GPS accuracy for the entire world. The United States has no intention of reactivating SA ever again.

Users in the U.S. and the rest of the world should now be experiencing the same basic GPS accuracy of 10-20 meters or better.

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Is the civilian GPS service now as accurate as the military's Precise Positioning Service (PPS)?

In theory, civil receivers should now match the accuracy of PPS receivers under normal circumstances. We are in the process of collecting data to verify whether this is true. PPS still gives advantages to the military beyond accuracy.

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Is the SPS Signal Specification going to be updated?

On October 4, 2001, the agencies of the Interagency GPS Executive Board finalized and released the revised [GPS Standard Positioning Service \(SPS\) Performance Standard](#), taking into account the new levels of performance achievable without SA.

The SPS Performance Standard differs from the previous SPS Signal Specification in several ways. Rather than focus on the accuracy levels achievable on the ground, the document provides guarantees on the characteristics of the signal in space and the satellite constellation. This allows end users in different parts of the world to make more accurate

predictions of GPS performance in their particular location, taking into account regional effects of the atmosphere and satellite geometry, as well as the effects of their particular user equipment.

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