

## Satellite Crash A 'Heavy Loss'

December 14, 2010



SEVERODVINSK, Arkhangelsk — Satellite infrastructure for Russia's challenge to the U.S. global positioning system will be ready by March despite the "heavy loss" of a failed launch, the Federal Space Agency chief said.

Three satellites plunged into the Pacific Ocean last week after a rocket launch went wrong, setting back the Kremlin's plans to complete its Glonass navigation system.

"This for us was a very heavy loss," agency head Anatoly Perminov said Monday.

But Russia has activated two satellites previously in reserve and will launch two more — one in December and one in March.

"We can launch the last satellite in March; we are resolving the last remaining issues with the Defense Ministry. ... The satellites group will then be fully operational, with only a threemonth delay," he said.

Analysts estimated the loss of the three satellites at \$160 million. The state has spent over \$2 billion in the last decade on achieving what Prime Minister Vladimir Putin has called "satellite

navigation sovereignty."

Russia had 20 active satellites of the needed 24 to complete the system, and analysts had said the failed launch would delay operations by up to six months.

Russia has high hopes that the technology will lead a domestic revolution in consumer devices such as smartphones and vehicle sat-navs.

Rocket and space company Energiya said Monday that the rocket had veered off course because of human error and overloading.

Perminov said a government commission was investigating the crash and would deliver a report on Dec. 20.

Original url: https://www.themoscowtimes.com/2010/12/14/satellite-crash-a-heavy-loss-a3735