Programming error caused Russian satellite failure: report

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A programming error may have caused a rocket carrying three Russian navigation satellites to fail to reach orbit, a Russian space agency source told the RIA Novosti news agency on Monday.

"A number of specialists think that mistakes in the programming of the onboard computer system of the Proton rocket led to the engines sending the rocket too high and onto a faulty trajectory," the source said.

The rocket carrying satellites for the Russian government navigation system Glonass, failed to reach the correct orbit Sunday after blasting off from Baikonur cosmodrome, the Russian space agency said.

The satellites crashed into the Pacific Ocean near Hawaii, the spacecraft corporation RKK Energiya said in a statement, confirming earlier reports.

"The Proton launch rocket functioned abnormally, sending the three Glonass satellites and the upper-stage booster rocket on the wrong trajectory and they fell into the Pacific Ocean 1,500 kilometers northwest of Honolulu," the statement said.

Once separated from the Proton launch rocket, the upper-stage booster rocket with the three satellites aboard should have put them in orbit about 20 kilometres (12 miles) above the earth.

A space agency source told RIA Novosti that the upper-stage rocket and

the satellites immediately disappeared from radio coverage, making it impossible to correct the trajectory.

President Dmitry Medvedev ordered the Prosecutor General Yury Chaika to investigate the loss of the satellites and name the people responsible, the Kremlin said in a statement on its website late Sunday.

The terse statement said the president had also demanded an audit of spending on the entire Glonass programme.

The failure was an embarrassing setback for Russia's attempt to put a satellite navigation system in place to rival the United States's GPS (Global Positioning System) and steal a march on Europe's fledgling Galileo system.

Prime Minister Vladimir Putin has underscored the strategic significance of developing the Glonass system to ensure Russia's technological independence.

In a publicity stunt, he even fitted his dog Connie with a collar with a Glonass transmitter.

Putin said in April that Russia planned to equip all new cars sold in Russia in 2012 with the new navigation system, developed by the Russian military in the 1980s.

He said Moscow planned to launch a total of seven new Glonass satellites which would ensure coverage of the entire planet, bringing to 27 or 28 the number of operational satellites.

It currently deploys 26 satellites, six of which are not in use.

Russia planned to spend 1.7 billion rubles (40 million dollars) on the

project in 2011, after two billion rubles spent in 2010, Putin said.

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