## Atom Tests Stepped Up By Russia

## Part of New Activity Believed Geared to Peaceful Projects

By Howard Simons Washington Post Staff Writer Soviet Russia is stepping up its underground atomic test program both in the number of tests conducted and the size of the blasts.

Some officials here speculate that a part of the increased Russian activity is almed at developing peaceful atomic explosives for digging canals, blasting tunnels through mountains and other Project Plowshare goals, as the comparable American effort is called.

There are indications, too, that the United States and Russia are edging toward some kind of cooperation in the development and use of Plowshare devices without jeopardizing the limited test ban treaty. The treaty bans underground atomic tests that cause radioactive debris to

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cross the national boundary of the testing nation.

Thursday's accidental release of radioactive debris from an underground blast at the U.S. Nevada atomic test site scattered across several Western states but apparently not across the U.S. border. Accordingly, the treaty was not violated.

Russia was not as lucky on Jan. 15, 1965 when an underground test at Semipalatinsk in central Soviet Asia sent radioactive debris into the air. The Russian fallout was detected over Japan. Though strictly speaking the Russians had violated the treaty, the U.S. did not press the matter.

Now, it turns out, the Jan. 15 Russian test was either entirely or partially a Plowshare experiment. Informed sources yesterday said there is evidence that the blast was a cratering experiment of the kind the U.S. has conducted and wants to conduct more of

Such cratering experiments are essential to any future atomic excavation projects, including the digging of a new Panama Canal with atomic explosives. In recent testimony to the Congress, officials of the Atomic Energy Commission said there are plans for two, relatively small atomic cratering experiments in fiscal 1966 and another two in fiscal 1967.

In addition, there will be two more ambitious atomic experiments in fiscal 1967, one related directly to what it takes and how much it will cost to gouge out a new Panama Canal with atomic blasts. Discussions Held

Just what the Russians have in mind is not known. Nonetheless, there have been continuing discussions, albeit lowlevel and informal, between diplomats of the United States and Russia on possible Plowshare cooperation.

The idea seems to be that Moscow and Washington have come to the realization that the treaty is inhibiting Plowshare developments and perhaps the first step before seeking a modification of the treaty is to seek cooperation.

What is known is that the Russians are intensifying their underground test program. Russia never announces such tests, but the AEC announces some of them for the Russians. Since Aug. 3, 1963, when the limited test ban treaty was signed, the AEC has disclosed nine Soviet tests—two in 1964, four in 1965, and three so far this year, the last blast on April 22.

Another fact evident in what the AEC says about the Russian tests is that the Soviets are routinely setting off more powerful atomic devices than is the United States,